ABSTRACT

EDUCATIONAL LEADERSHIP

GIBBS, LAKEISHA NICOLE B.S. GEORGIA SOUTHERN UNIVERSITY, 2002

M.ED. COLUMBUS STATE UNIVERSITY, 2005

PERSISTENCE OF GRADUATE STUDENTS AT AN URBAN RESEARCH INSTITUTION IN THE SOUTHEASTERN REGION OF THE UNITED STATES

Committee Chair: Dr. Trevor Turner

Dissertation dated July 2012

Attrition rates have remained at the breadth of significant concerns for higher education institutions. During the progression toward a graduate degree, countless students lose focus and "stop-out." An unsuccessful practice in higher education is the lack of concentrated initiatives to retain graduate students and assist in providing resources to support persistence. Alas, graduate students are abandoned and forced to navigate programs in isolation. Therefore, this study examined the problem of persistence of students in graduate programs and the extent to which variation in such persistence may be influenced by: (a) demographic factors, (b) program advisement, (c) research advisement, (d) financial aid status, (e) student involvement and socialization, (f) family and peer support, (g) institutional physical resources, (h) student response to environmental distractions, (i) student response to academic structure, and (j) academic peer support. Additionally, the purpose of this study was to identify whether

there was a significant relationship between persistence of graduate students at an urban research institution in the Southeastern region of the United States on selected variables, which may indicate factors for success in graduate program completion. This study attempted to discover the impact of variables on the persistence of graduate students toward degree completion. The objective of the research was to focus specifically on students engaged in graduate programs in pursuit of advanced degrees at the master's, specialist, and doctoral levels at an urban research institution in the Southeastern region of the United States.

PERSISTENCE OF GRADUATE STUDENTS AT AN URBAN RESEARCH INSTITUTION IN THE SOUTHEASTERN REGION OF THE UNITED STATES

A DISSERTATION

SUBMITTED TO THE FACULTY OF CLARK ATLANTA UNIVERSITY

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF DOCTOR OF EDUCATION

BY

LAKEISHA NICOLE GIBBS

DEPARTMENT OF EDUCATIONAL LEADERSHIP

ATLANTA, GEORGIA

JULY 2012

ACKNOWLEDGMENTS

I would like to take the opportunity to acknowledge family and friends who invigorated, motivated and encouraged me towards the completion this arduous undertaking. Thank you GOD! To my daddy, Worthington Gibbs, thank you for being a true example of what a man should be. Your patience and faith have served as tremendous influences on my life. No matter how old I am, I will always be your "girl." To my mommy, Jacqueline Gibbs, you are the definition of strength, confidence, and individuality. Thank you for daring me to live above the influence. You planted the seed about the importance of education throughout my childhood and now we're celebrating the harvest. To my brother, Michael Gibbs, thank you for your calmness and reassurance that all would be well. You were right! To L8DY, my sisters since '98, thank you for your encouragement. To Sasha, Sherily, Brandon, Nailah, Dr. Moffett, Dr. Elston, and Dr. Bailey, thank you for your unwavering support. To Deborah, thank you for being my motivator – your turn! To Gena, your optimism and beautiful spirit has made an indelible mark on my life. To Brandon, my dear friend, thank you for being there when I thought all of this had fallen apart. Your support meant more to me than you will ever know. To the CAU crew, we did it! To all others connected to me, I hope that I have made you proud.

TABLE OF CONTENTS

Table of Contents (continued)

Table of Contents (continued)

LIST OF FIGURES

FIGURE PAGE

LIST OF TABLES

List of Tables (continued)

TABLE PAGE

CHAPTER I

INTRODUCTION

Background of the Problem

Persistence throughout an advanced program necessitates an unrelenting effort, in order to successfully attain a graduate degree. Graduate programs offer an innumerable variety of benefits to students. While there has been much research regarding the undergraduate student experience, the sector of graduate education has not received a copious amount of attentiveness (Gururaj, Heilig, & Somers, 2010). According to Cooke, Sims, and Peyrefitte (1995), the lack of research related to graduate student attrition can be attributed to smaller numbers, which make universities less concerned about the issue. However, within recent years, concerns have been raised about the graduate school experience and the extent of students' perseverance toward completion of a graduate program. The impact of graduate student attrition, from the organizational perspective, occurs with a great cost to the institution (Neshiem, Guentzel, Gansemer-Topf, Ross, & Turrentine, 2006). In its entirety, the graduate education pursuit demands a high level of commitment. "Graduate persistence is, at one and the same time, both more local and national in character than is undergraduate persistence" (Tinto, 1993, p. 234). Institutions are gradually becoming more fundamentally aware of the issue of attrition in advanced degree programs.

The quandary for many colleges and universities lies in defining the reasons why graduate students are unsuccessful at high rates (Golde, 2005). Subsequently, this predicament should lead to the creation of plans to counteract attrition rates at the graduate level (Decker, 1973). With the expansion of various types of program offerings by educational institutions, graduate students are provided a wealth of academia prospects. The massive influx of distance learning has become increasingly popular over the last several years, with many students electing to pursue both master's and doctoral degrees online. Higher education institutions such as Capella University, University of Phoenix, and Strayer University provide accessibility for student achievement of educational ambitions, in a convenient format, requiring high levels of self-motivation in collaboration with available resources for success (Rakes & Dunn, 2010; Deggs, Grover, & Kacirek, 2010). The astronomical innovations of technology produce an additional construct to the issue of persistence. Although online education has positioned itself as a mainstay in the scholastic marketplace, this study focused on the traditional program offerings at a distinctive Southeastern campus. The purpose of this study was to examine the extent to which students persist in graduate programs at an urban research institution in the Southeastern region of the United States.

The institution, a historically black college and university, has established itself as a viable option for students in the pursuit of a quality graduate education. Offering graduate programs in Business, Arts and Sciences, Social Work, and Education, the institution fosters an environment for students to further educational goals beyond the baccalaureate degree. The average time to complete graduate programs varied according

to degree type and program of study at the institution examined. According to the Office of Planning, Assessment, and Research (2010), during the years 2005 and 2010, 30% of master's students completed programs in 1 to 2 years. In 2005, 25% of doctoral students completed programs in 3 to 4 years. Further, in 2006, 41% of doctoral students completed programs in 3 to 4 years. In 2006, 6% of doctoral students completed programs in 3 to 4 years. Students' pursuing graduate studies has declined significantly. During fall 2006, 833 students were pursuing programs. For fall 2010, only 674 students were enrolled in graduate programs.

In order to gain admittance into master's, specialist, and doctoral programs; students must meet certain specific requirements. The factors in the admissions selection process may vary; depending on the rigor of the program and the institutional reputation (Brink, 1999; O'Neill et al., 2002). However, irrespective of the program, all institutions accept the following: (a) application form, (b) official transcripts from all previously attended institutions, (c) letters of recommendation, and (d) demonstration in English proficiency (Diminnie, 1992). The variance of documentation required for programs involve test score requirements and interviews. According to Dube and Zinatelli (1997), the student interview can play a significant role in the selection of the right graduate students. A number of institutions require an entrance exam: the Graduate Record Exam (GRE), Miller Analogies Test (MAT), Law School Admission Test (LSAT), Graduate Management Admission Test (GMAT) or Medical College Admission Test (MCAT). Each examination is used to determine the qualifying rank of an application to the particular graduate program. Kuncel and Hezlett (2007) suggest that standardized tests

have positive correlations to the achievements of students in graduate programs. Upon acceptance to the program of choice, the journey of graduate education commences. Conversely, this initiates the attrition battle for many institutions.

Attrition rates have remained at the breadth of significant concerns for educational institutions for countless years. Bell (2011) asserts that the most pertinent issues for graduate school deans are (a) enrollment management, (b) financial support, (c) budget cut concerns, and lastly ranked (d) student support and services. During the progression toward a graduate degree, many students lose focus and "stop-out." An unsuccessful practice in higher education is the lack of concentrated initiatives to retain graduate students. Alas, graduate students are abandoned and forced to navigate programs in isolation (Polson, 2003). At the doctoral level, over 40% of students who begin programs do not complete (Lovitts, 2001; Golde, 2005). Moreover, Decker (1973) addressed three critical factors which influence success and attrition in graduate studies. These factors include (a) the nature of the previous undergraduate institution, (b) gender comparisons, and (c) the elapsed time from undergraduate studies to entry into a doctoral program. An additional element in student persistence implicates prior attendance at a particular type of institution. The impact of success in the completion of a graduate program requires a concerted effort from both the student and institution, respectively. The development of programs to assist in lessening the graduate attrition rate is a vital institutional responsibility. To address the issue of attrition, the Mellon Foundation constructed the Graduate Education Initiative. The main purpose of the initiative was to discover systematic strategies in the structure of Ph.D. programs in an effort to positively

impact the reduction of student attrition (Groen, Jakubson, Ehrenberg, Condie, & Liu, 2005).

On a national scale, over 1.5 million students are currently enrolled in institutions; including students pursuing master's, specialist and doctoral level programs (Brown, 2005). Master's programs provide a wide array of higher learning for individuals seeking to progress in careers, within a specified field. After obtaining a bachelor's degree, a student chooses to navigate through graduate coursework at the master's level. A number of graduate programs provide opportunities for internships, which allow students to acquire skill sets in a variety of fields. Tinto (1997) suggests that there are four stages of persistence in a doctoral program. The stages include (a) pre-entry stage, (b) the beginning of doctoral study, (c) period of study, and (d) completion of the research proposal. During the pre-entry stage a student focuses on the preparation to enter the program, becomes acclimated with advisement procedures, and plans a sequence for completion. Next, the student begins coursework and is able to move forward in gaining the classroom knowledge in the specific field of study. The last stage of doctoral persistence is the stage in which a student submits the proposal, gathers the necessary research for the study, and completion of the dissertation, including the dissertation defense. Electing to attain the highest level of educational achievement is one which students approach quite adamantly. This decision requires a substantial level of commitment, interpersonal fortitude and scholastic aptitude. When students choose to move in the direction of doctoral attainment, several do so with a myriad of intentions. Thus, throughout the journey of persistence there are various hurdles students must

overcome when pursuing advanced degrees. Along the journey of progression toward attainment of the degree, students are faced with personal and professional challenges (Felder, 2010).

Statement of the Problem

The lack of persistence of graduate students in the higher education sector is a matter of extraordinary concern. Institutions of higher learning are charged with the colossal responsibility to provide opportunities for advanced degrees to students who meet exacting qualifiers. In doing so, the student and university equally benefit from the completion of graduate programs. The hierarchy in higher education allows students who wish to further their education, an opportunity to ascertain specific knowledge, in a selected area of interest. Persistence during the course of a graduate program at the master's, specialist and doctoral level requires a plethora of components for successful attainment. Inopportunely, the persistence factor does not always end in a positive manner. The sheer reality for many institutions is that students begin graduate programs and do not complete. Many doctoral candidates are able to persist through the required coursework, but remain "all but dissertation" (ABD). As higher education professionals, it is disturbing that a great number of students investing in education beyond a bachelor's degree do not complete graduate programs. The theoretical reasons for doctoral attrition vary (see Table 1). According to Neshiem, Guentzel, Gansemer-Topf, Ross, and Turrentine (2006), "the further students get into the doctorate or professional degree, the greater the time and expense put into the degree by the student and the institution" (p. 6). It is imperative that educational institutions produce graduates in order to gain interest

from prospective students, to remain competitive in the educational marketplace, and to fulfill requirements from the accreditation bodies under which they are governed.

Table 1

Theoretical Categorization of Reasons for Doctoral Attrition

	Discipline	Department
Mismatch/Incongruence	Does not fit with conventional ways of being a researcher or scholar in the discipline	Does not fit with ways of Being a student or junior scholar in the department
Isolation	Marginalized from the Discipline	Marginalized from the departmental community

The caliber of the institution, and in conjunction, the prior educational achievement one has successfully completed preceding the pursuit of additional degrees proves the capacity for completing this altruistic goal. In the context of graduate programs, students apply to institutions from an assortment of backgrounds. Many graduate programs have limited prerequisites, which allows for a wide array of applicants. Essentially, the rigor of an undergraduate program can serve as a justifiable measure of persistence. Applicants for graduate programs run the educational gamut and this allows for varied academic ability in student acceptance rates. In Humanities, Social Sciences, Business, and Education; degrees are awarded at varying rates (see Table 2). Decker (1973) indicated that students who attended what many would consider a "good" school for undergraduate studies, proved successful in the pursuit of doctoral candidacy.

Table 2

Graduate Degrees Conferred by Program in the United States 2008-2009

Program	Masters	Doctoral
Humanities	3,728	67
Business	168,375	2,123
Education	178,564	9,028
Social Sciences	15,698	3,316

Numerous determining factors play a key role in the selection of an optimal programmatic choice in line with the goals of the student. It is imperative that students are able to accomplish both academic and social goals in a graduate program environment.

The end result of persisting toward degree completion is the participation in commencement and formal awarding of the diploma during the ceremony, at the institution. Characteristics of institutions awarding the most degrees vary by geographic region and institutional landscape. The National Center for Education Statistics (2011) compiled a list of the top 60 higher education institutions conferring doctoral degrees in the United States (see Table 3).

A great matter of persistence toward a graduate degree supports the notion that it is a journey for not only the individual, but the family unit as well. The support of family and/or friends is a crucial element of encouragement toward the objective of degree attainment.

Table 3

Top 5 Intuitions Conferring Doctoral Degrees in the United States 2005-2009

Institutions	2005-06	2006-07	2007-08	2008-09
University of California, Berkley	763	903	873	869
University of Texas, Austin	796	779	868	824
Nova Southeastern University	757	911	881	772
University of Wisconsin, Madison	648	775	763	794
University of Michigan, Ann Arbor	763	789	753	842

It is said that it takes a village to conquer the goal of pursing graduate education. Specifically for doctoral candidates, job and family support are key components in persisting toward completion. Emotional support from family members is often cited as dire to those in the doctoral process, providing them with the reassurance needed to persist and thrive (Maher, Ford, & Thompson, 2004). Another element of the graduate student experience is that most students who pursue advanced degrees are also employed on a full-time basis. McCoy and Gardner (2011) suggest that the demands of job responsibility play a critical role in the completion of graduate coursework. Support staff, managers, mid-level managers, and administrators have varying levels of obligation, which may affect academic engagement.

In certain graduate programs, a cohort-based schematic exists, which provides structure for traversing coursework and creating a sustainable timeline. However, when this is not the case, the advisor is a vital component in supporting a student in creating a timeframe for completion of a degree. The primary role of the program advisor is to

provide guidance and direction throughout the journey to completion of the program. Unfortunately, many master's, specialist and doctoral programs have a deficiency of structure in regard to the advisement component. The students are provided a planned program, but are independently making their way through selection and order of coursework. An efficient advisor allows students to provide feedback on their career and academic goals and helps to configure classes which will create a sensible pathway throughout the specific program. There is a distinct link between the advisor and the student. Advisement incompatibility coupled with a lack of engagement, trust, and intellectual support can contribute to attrition in graduate programs (Golde, 2005; Punyanunt-Carter & Wrench, 2008; Brockman, Nunez, & Basu, 2010).

Outside of the classroom, student socialization creates an opportunity for interaction between classmates. Involvement in student organizations, clubs, and participation in departmental events facilitates an atmosphere for students to build networks and necessary support systems (Rajagopalan, 1999). For example, the development of the Educational Leadership Student Association (ELSA), at the institution used in the research was designed with the charge to: provide students the chance to bond outside of the classroom, to share information, and to afford opportunities for professional development. Gardner (2005) established that student participation in graduate student organizations increased social interaction with peers and professional development opportunities which created a level of socialization beyond the classroom environment. O'Neill, George, Willson, Courville, McGee, Amad, et al. (2002) asserts that "socialization of graduate students takes on varying forms so that students reach the

required levels of personal and professional competence as well as commitment to a particular field of profession" (p. 87). The advantage of becoming a contributor of the socialization aspect of a graduate program affords opportunities for networking, connections to the community and professional development (Polson, 1998; Gardner & Barnes, 2007).

Several demographic factors have been cited as contributors to the persistence of graduate students. More specifically; considerations of age, gender, undergraduate grade point average, GRE scores, and ethnic background confirm implications on graduate student persistence. Examining differences in gender as it relates to graduate student persistence suggests a variance in the way men and women persist toward degree completion. As recently as 2000, women were earning only 44% of doctoral degrees. Women now account for 50.4% of doctoral degrees, slightly surpassing men. In master's degrees, where women have already accounted for a majority of degrees, their share now stands at 60% (Council of Graduate Schools, 2010).

Research has also shown test scores and undergraduate grade point average as indicators for success in a graduate program. Kuncel, Wee, Sarafin, and Hezelett (2010) found that "both the GRE-V and GRE-Q were found to be valid predictors of graduate GPA and first year graduate GPA in both master's and doctoral programs" (p. 347). The undergraduate cumulative grade point average has been studied as a factor in the attainment and completion of a graduate degree. Willingham (1974) conducted research to examine the characteristics of students with a myriad of test scores on the Graduate Record Exam (GRE). According to the findings, the GRE score and undergraduate grade

point average (GPA) have been implicated as predictors for success in graduate work (see Table 4). Further, a supplementary element of demographic consideration is student financial aid status. Acquiring the financial burden of graduate school is also indicated as a concern in graduate student persistence. Students pursuing graduate degrees are able to receive a variety of financial aid. Students are eligible to apply for loans, grants, scholarships, assistantships, and fellowships. Inadequate funding can certainly deter a student from persistence toward degree completion. The financial burden of attending school could potentially dissuade students from persisting. Moreover, students who decide to "stop out" due to lack of funding are unlikely to persist toward degree completion (Ehrenberg & Mavros, 1992; Liseo, 2005).

Table 4

Predictors of Success in Ph.D. Completion

	Criteria of Success				
Predictors	Graduate GPA	Overall faculty Rating	Departmental Rating	Attain Ph.D.	Time to Ph.D.
GRE-verbal	.24 (46)	.31 (27)	.42 (5)	.18 (47)	.16 (18)
GRE-qualitative	.23 (43)	.27 (25)	.27 (5)	.26 (47)	.25 (18)
GRE-advanced	.30 (25)	.30 (08)	.48 (2)	.35 (40)	.34 (18)
GRE-composite	.33 (30)	.41 (08)	*	.31 (33)	.35 (18)
Undergraduate GPA	.31 (26)	.37 (15)	*	.14 (30)	.23 (09)
Recommendations	*	*	*	.18 (15)	.23 (09)
GRE-GPA comp	.45 (24)	*	*	.40 (16)	.40 (09)

This study explored the issue of student persistence in graduate programs and the extent to which the variation of such persistence may have been influenced by demographic factors, program advisement, research advisement, financial aid status, student socialization and involvement, family and peer support, institutional physical resources, student response to environmental distractions, student response to academic structure, and academic peer support.

Purpose of the Study

The number of students who do not persist toward completion of graduate level programs has generated interest as a topic area to be further examined. To this end, a graduate student who begins a master's, specialist, or doctoral program and never completes has become a mainstay for institutional concerns in the higher education realm. The issue of attrition is substantially important because students at the master's, specialist and doctoral level begin programs and do not complete, for analogous reasons. The responsibility and acceptance that come along with matriculating through rigorous courses geared toward a higher level of academic competency, offers graduate students an opportunity to acquire knowledge, skills and dispositions in a variety of fields. The graduate classroom environment is one of collaboration amongst colleagues, which range from novices to seasoned professionals. This diversity allows for a cadre of experiences being expressed in an academic setting, wherewith each party benefits from the shared best practices.

As Lovitts' (1996) findings indicate, structural factors contribute to the patterns in why students do not persist. The findings determined the reasons as (a) fellowships,

which preclude students from engagement into the academic community, (b) the absence of attentiveness to student advancement, (c) insufficient support from faculty, (d) the lack of consideration for student interests outside of the classroom, (e) the lack of faculty awareness, and (f) the lack of cognitive directives which assists students in navigating through completion of the program. Due to the economic climate of our country, students are making the deliberate decision to pursue advanced degrees. During the fiscal catastrophe, students have returned to school at much higher rates. According to the Council of Graduate Schools (2009), applications to graduate programs increased by 8.9 percent from fall 2008 to fall 2009. Although graduate students are enrolling at higher rates, the warranted concern from the administrative perspective is the lack of completion of these programs. It is a great advantage to universities to enroll new graduate students; however, there is growing institutional apprehension for students who begin programs and become noncompleters.

Due to the economic climate of our country, students are making the deliberate decision to pursue advanced degrees. During this fiscal catastrophe, students have returned to school at much higher rates. A plethora of programs have experienced higher enrollment, due to the downturn of the economy. Although the rates of graduate students pursuing advanced degrees have surged, the concern for institutions is that students become a part of the scholastic community and remain in graduate programs throughout the duration; to successfully complete their degree programs. Graduate student persistence has been impacted by the recession. Research indicates decreases in successful persistence for graduate students. According to Bell (2011):

> The recession is likely at the root of this decline. Since most graduate students in education are self-funded or employer-funded, we can surmise that the decrease in first-time graduate enrollment in education in fall 2010 reflects the hesitancy of prospective students to take on debt or to leave jobs for graduate school and an uncertain future, the hesitancy of employers to pay for graduate school for employees. (p. 7)

The most significant drop in graduate programs persistence revealed the broad field of education, with a decrease of 8.3%.

Departmental support, opportunities for student engagement, succinct advisement, and opportunities for collegial interaction beyond the classroom should be undeviating fixtures in the graduate program landscape. Shambaugh (2000) asserts that "graduate school provides a critical time for a student to become more experienced in the values, norms, and practices, of the chosen profession while also developing the skills, tools, and habits of inquiry within a discipline" (p. 296). The purpose of this study was to identify whether there is a significant relationship between persistence of students in graduate programs at an urban research institution in the Southeastern region of the United States on selected variables, which may indicate factors for success in graduate program completion.

Research Questions

With regard to the statement of the problem, and in accordance with the purpose of the study, the following research questions were formulated to guide this study:

RQ1: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *demographic factors: (a) race, (b) age, (c) program of study, (d) undergraduate GPA, (e) gender, and (f) GRE score*?

RQ2: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *program advisement*?

RQ3: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution *and research advisement*?

RQ4: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution *and financial aid status*?

RQ5: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *student socialization and involvement*?

RQ6: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *family and peer support*?

RQ7: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *institutional physical resources*?

RQ8: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *student response to environmental distractions*?

RQ9: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *student response to academic structure*?

RQ10: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *academic peer support*?

RQ11: Is there a significant difference among the four selected programs on the *persistence of graduate students*?

RQ12: Is there a significant difference among the four selected programs on the *selected independent variables*?

Significance of the Study

This study is significant because of the implications of benefits for completing advanced degree programs. This study attempted to discover the impact of variables on the persistence of students in graduate programs toward degree completion. To this end, colleges and universities must adjust current practices and formulate strategic efforts to provide student services and enhance enrollment management processes; which keep students engaged, involved academically, and socially connected. The objective of the research focused specifically on graduate students engaged in programs in pursuit of

advanced degrees at the master's, specialist and doctoral levels at an urban research institution in the Southeastern region of the United States.

Educational leaders are impacted by the lack of persistence of graduate and professional students, as it is a direct contradiction to the mission of the profession. As higher education administrators examine ways to assist students throughout the process of graduate student persistence, the contributing factors must be taken into consideration. The graduate student population is an extremely important fiber of the collegial landscape. However, student persistence can be heavily impacted by the lack of an institutional obligation to impart resources, programmatic values, and strategic planning into the success of graduate students.

Summary

Chapter one provided a thorough explanation for the background for the study. Additionally, this chapter described the issue of student persistence and attrition at the graduate program level. The purpose of the study, statement of the problem, significance of the study, and research questions provided the foundational map for guiding the research.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

This chapter presents findings in educational research directly related to the issue of factors which impede and contribute to graduate student persistence. The section begins by investigating key variables, which are further explained throughout the exploration of the literature. The review of literature inspected crucial variables under the broader subject of factors encompassing graduate student persistence which include: (a) demographic factors, (b) program advisement, (c) research advisement, (d) financial aid status, (e) student socialization and involvement, (f) family and peer support, (g) institutional physical resources, (h) student response to environmental distractions, (i) student response to academic structure, and (j) academic peer support. Much of the literature surrounding student persistence and attrition refers to the undergraduate student population experience. However, this review provided an in-depth view of factors affecting graduate student persistence with regard to degree completion.

Persistence and Attrition

Cooke, Sims, and Peyrefitte (1995) examined graduate student attitudes and the relation of said dispositions to the issues of graduate student attrition. The purpose of the study was to determine avoidable variables which may attribute to graduate student attrition. The researchers administered a survey questionnaire to participants.

Participants included 230 students enrolled in four graduate colleges: (a) Business, (b) Engineering, (c) Public Administration, and (d) Education. The study focused on students enrolled specifically in master's programs. The findings of the study indicated that graduate student attitudes were indicated as contributing factors in attrition. Additionally, students with a high level of satisfaction with the institution were least likely to drop out. As previously thought, the survey was not able to support alienation or social support as predictive factors for attrition.

The Office of Institutional Research at the University of Maryland-Baltimore County (2003) conducted a study on Ph.D. Persistence and Attrition. The study involved data collected to provide a student's history between Spring 1990 and Spring 2002. Students were then assigned a classification based on their current standing at the time of the research. The classifications were one of the following categories: dropout, master's and left, master's and still enrolled, master's and stop-out, master's and in last semester, Ph.D., or still enrolled. The findings showed that the average time for a student to complete a Ph.D. program at the University of Maryland-Baltimore County increased from 6.13 years in 1997 to 7.30 years in 2002. The finding also indicated that of the 363 new Ph.D. students who began programs between 1997 and 2002, 58.7% of students left programs after completing only two semesters.

According to Strayhorn (2010), several factors contribute to graduate student persistence. The researcher collected data from students who completed bachelor's degrees from 1992-1993. Participants in the study consisted of 3,328 graduate students. The approach used in evaluation infused a nonintegrated model. The findings indicated

that financial support, academic preparation, and non-academic variables have a prominent impact on graduate student persistence. The purpose of the study was to determine factors which affect graduate student persistence beyond the socioeconomic variable. Due to the lack of existing research on the factors which affect persistence at the graduate student level, Strayhorn's (2010) research provides a foundational basis for graduate deans, administrators, and faculty members who seek to decrease attrition at this level.

Student Response to Academic Structure

The academic structures of doctoral programs provide the backdrop for student navigation toward achievement of a graduate degree. Golde (2005) examined the departmental responsibilities and how the lack of accountability within the discipline, contributes to doctoral student attrition. To further explore the critical issue of student attrition, Golde directed a study with interviews of 58 students, who did not successfully complete the Ph.D. in four departments (History, Geology, Biology, and English) at Midwestern University. The goal of the research was to investigate the strength of the relationship between six themes, and further, to gain an understanding of how these themes contributed to attrition. The six themes inspected in the study were: (a) research practices not a match with student strengths, (b) poor fit of expectations between student and department, (c) inaccurate expectations of nature of graduate school, (d) academically underprepared, (e) mismatch between advisor and student, (f) student perceptions of research and university faculty life is incompatible, (g) student perceives job market to be poor, and (h) structural isolation of the student.

The findings concluded that there is a significant relationship between the student and the discipline, which contributed to attrition. Additionally, findings indicated a significant relationship between student isolation from departmental communities which also contributed to attrition. In theme 1, students who identified themselves as not being well-equipped researchers considered leaving the program. In addition, theme 2 places emphasis on the admissions office and the process by which students are selected for entry to graduate programs. If the student is not a good fit for the department, academically unprepared for this level of study, and not well-versed in the expectations of graduate school it is determined that these factors contribute to doctoral student attrition. Further, theme 3 asserts the notion of unsuited relationships between students and the advisor. The rapport between advisor and advisee is a critical component of the doctoral student educational experience. Theme 4 suggests that perceptions of research were congruent with students feeling the loss of identity of being associated with the discipline for long term research. The research also indicated that the ability to attain a meaningful career path is a key motivator for pursuing graduate programs. Theme 5 was consistent after students left the program, but realized the competitiveness of the job market would overrule having completed graduate study. It is common for graduate students to experience some degree of confusion when traversing through coursework and the dissertation process. In theme 6, students experienced isolation due to the nature of graduate study. Some students were not prepared for such small networks of students and faculty in the department. Also, students did not feel cohesion, and therefore, did not feel as if they were a part of the graduate community.

West, Gokalp, Vallejo, Fischer and Gupton (2011) examined the student aspect of challenges as it relates to doctoral attrition and the use of the Doctoral Support Center (DSC). The research is separated by two emphasis areas: (a) the barriers experienced by students and how those challenges contribute to doctoral student attrition and (b) the value of the Doctoral Support Center as it relates to providing services to students. The Doctoral Student Support Center was established in 2004 to provide workshops, writing support, and student advisement on navigation through various portions of the doctoral program in the School of Education. The participants of the study ranged from one of eight cohorts within the School of Education. Of the participants, 77% indicated use of the Doctoral Support Center a minimum of once during the semester which the assessment was given. Furthermore, of the participants, 46 were in courses during the time of the assessment and 54% had completed coursework at the time the assessment was administered. The findings indicated that students revealed the most common challenge in navigating the Ed.D. program at a research university, was the organization of life and time. According to the research findings, sixty percent of participants found challenges with work-life commitments. Additionally, students found it difficult to schedule time with advisors, due to lack of communication and program structure. The findings of the study, related to the Doctoral Support Center, asserted that 73% of the participants indicated a positive experience in receiving assistance in navigation of the program.

Program and Research Advisement

De Valero (2001) examined several factors affecting completion rates at a research institution. The study analyzed departmental factors including; policies and practices, advisement, and departmental climate. The research was conducted in two segments. The first phase took into account the amount of time students were able to successfully complete a doctoral program within three departments: social science, engineering, and science. De Valero obtained institutional data for students enrolled between 1986 and 1990 for the first phase of the study. Regarding the time-to-degree completion rate findings, the research concluded that by fall 1995, 45% of students were no longer in the doctoral program. The next phase examined the differentiation of varying factors which affect the time-to-degree and completion rates. Forty participants contributed to the study. Of the participants, 16 were faculty members and 24 were students. During the 45 to 60-minute interviews, students were questioned on perceptions of advisement, departmental climate, and policies. De Valero reported results by 4 clusters: (a) high-short departments, (b) low-short departments, (c) high-long departments, and (d) low-long departments. In the high-short department, students had a positive advisement experience and also considered the interaction one of which promoted persistence toward completion of a graduate degree. Conversely, the low-short departments concluded that the lack of advisement was a negative factor in the progression towards degree completion. In the high-long departments, the advisement experience was a contributing factor toward degree completion. In the low-long

departments, the student advisement experience was similar to the low-short departments, in that participants found advising as a hindrance towards degree completion.

Nerad and Cerny (1993) examined the extent to which factors caused student persistence toward a doctoral degree at the University of California, Berkley. The study was conducted in five phases. First, the averages were calculated on the number of years taken to complete the degree. Next, national analysis was conducted, regarding degree completion rates and then localized in comparison with the University of California, Berkley. After completing the analysis, the student perspective was garnered by way of interviews and surveys. Nerad and Cerny then developed models based on the information gathered in the study to improve and provide feedback on attrition rates within the graduate department of the University of California, Berkley. For purposes of this study, advisement was separated into two categories: (a) advisement by dissertation chair and (b) departmental advising practices. Among the 1200 students who completed their dissertations between fall 1987 and fall 1988, the findings regarding advisement showed that 25% of students were very dissatisfied with the advisement experience. By contrast, in reference to the dissertation chair-student relationship, 92% were extremely satisfied with this interaction. The dissertation chair-student relationship proved successful when student expectations were met. Students expected to receive advisement on selection of a researchable dissertation topic, skill development, and structured guidance throughout the dissertation process.

Family Support

In order to successfully complete a doctoral program, students need to be supported by external interactions. Lovik (2004) examined the impact of the family on degree attainment during graduate study. The study focused on students pursing graduate studies at both the master's and doctoral level. The purpose of the study was to determine whether influences of the immediate family impede or assist in graduate degree completion. Participants identified in this study completed an undergraduate program between 1992 and 1993. Each of these students pursued graduate study after completing an undergraduate program. The data were analyzed in the way of several components which included: (a) graduate school applicants, by marital status and gender, (b) graduate school applicants, by parenthood status, and gender, (c) graduate degree recipients, by marital status and gender, and (d) graduate degree recipients, by parenthood status and gender.

The findings indicated that 40% of married participants applied to graduate school, while 60% of unmarried participants applied to graduate programs. In reference to parental status, the findings suggested that participants with no children applied to graduate school at a higher rate than those with children. Regarding marital status, the findings of the study indicated that students who received master's and doctoral degrees were more likely to be married than unmarried. Further, the findings also indicated that the attainment of a graduate degree was more probable for participants who had no children. Additionally, degree attainment for male participants was significantly higher than degree attainment for female participants who had no children.

Maher, Ford, and Thompson (2004) examined the factors contributing to degree attainment of women in doctoral programs. The participants for this study were comprised of 160 alumni who received a doctorate from the Stanford School of Education between 1979 and 1989. The researcher identified three types of students for purposes of the study. Early-finishers were identified as students who attained a doctoral degree in 4.25 years or less, average finishers were identified as students who attained a doctoral degree between 4.50 and 6.50 years, and late finishers were classified as students who attained a doctoral degree in 6.75 years or more. Several thematic factors contributed to or slowed the progress of degree completion for participants in the study. Early finishers reported receiving family support at a higher rate than late finishers. In addition to those findings, late finishers reported marital issues, family issues, and child-care duties as factors which slowed the progress of degree attainment. Maher, Ford, and Thomas suggest that "emotional support from family members is often cited as critical to those in the throes of the doctoral process, providing them with the encouragement needed to persist and succeed" (p. 388).

Brazziel and Brazziel (1987) conducted a study on the fundamental resources of support for black doctoral students. The first group of participants involved 52 black students who received their doctoral degrees in the humanities in six years or less. The second group of participants consisted of 198 students who attained doctoral degrees within thirteen of more years. In contrast to white students, black students did not list family as a source of support in attainment of the doctoral degree. Meanwhile, white

students qualified family support and contribution as 4.06% in assisting as a factor toward completion of a doctoral degree.

Student Socialization and Involvement

Student involvement and participation is highly regarded as a tool for navigating through a graduate program. Gardner and Barnes (2007) examined the aspect of socialization and the benefits of graduate student involvement. Ten higher education administration students, from five various institutions served as participants in this study. The qualitative approached was utilized for purposes of this study, due to a lack of statistical research on the topic. Participants were interviewed on topics concerning the benefits of being involved in student organizations, professional affiliations, and the like. The researchers specifically identified participants as doctoral students in a higher education administration program, due to the emphasis and importance of the mission of higher education for student involvement on varying levels. The field of higher education upholds a great expectation of student involvement; particularly for students at the undergraduate level. The participants in the study varied by gender, age, professional aspiration, program classification, and phase in the program. The researcher strategically selected participants for equal representation of perspectives. The demographics included; African-American students, five women, five men, and four Caucasian students.

The findings of the study produced four major themes with relation specifically to the benefits of graduate student involvement. The themes identified by the researchers included: (a) qualities of graduate involvement, (b) continuum of involvement, (c)

influences upon involvement, and (d) outcomes of involvement. The findings related to qualities of graduate student involvement showed that participants identified involvement with professional development. These opportunities are important at the graduate level of education. Although student involvement has a different value at the graduate level, it is still perceived as a benefit and imperative; especially for networking purposes. When participants provided feedback on the continuum of involvement, the varying types of involvement were made apparent. Professional associations and attending national conferences required a different level of involvement than being a member of a local organization. Participants indicated influences of involvement as faculty members, as well as classmates who were further along in the program. The overarching outcomes identified by participants in this study included: (a) networking, (b) connecting the classroom to the community, and (c) professional development. According to Gardner and Barnes (2007), graduate students "recognized the importance of involvement to their professional goals and the success in their future careers" (p. 13).

Gardner (2010) conducted a qualitative study on the perspective of socialization of doctoral students and the variance of such, by discipline and cultural influences. Participants included sixty doctoral students from six disciplines. The disciplines examined for purposes of this study included: Communication, Computer Engineering, Mathematics, Oceanography, English, and Electrical Engineering. The findings of the study produced four major themes which included: (a) support, (b) self-direction, (c) ambiguity, and (d) transition. As it relates to socialization, students felt supported mostly by peers in the program with whom they had built a rapport. However, students

in both mathematics and engineering felt supported more by faculty members. In reference to self-direction, students in both engineering and communication eluded to the concept more than other departments. These students felt a sense of independence in the control of completing the doctoral program in which they were enrolled. In each discipline the theme of ambiguity was referenced, especially relating to research and navigating the graduate student process. Transition was mostly linked to students in engineering and mathematics doctoral programs. In comparison, low-completing departments and high-completing departments showed drastic variance in each of the themes. Low-completing departments were highly identified by participants, as departments with a high lack of support. Participants identified high-completing departments more positively, related to the four emerging themes.

Sallee (2011) conducted a study on the differences with the context of gender as it relates to doctoral student socialization. The study focused on gender, described by the researcher as "femininity" and "masculinity" (p. 191). The researcher gathered data from a large private institution with a total student population of 33,000 students. The participants selected for study were both faculty and students in the Aerospace and Mechanical Engineering department. A combination of interviews, documents, and observations were used as mediums to gather data for the study. The findings indicated students are socialized within the discipline to favor more masculine trends. Sallee also noted that, "while AME students learn explicit norms—such as objectification of women—they are simultaneously socialized into the implicitly, gendered culture of the discipline that revolves around professional roles and relations" (p. 201).

Johnson-Bailey, Valentine, and Cervero (2009) conducted research focused on the experiences of black graduate students at Southern research institution. The university is located in a state with a population of 29% blacks. However, the setting where the study took place has a black graduate student population of 7.9%. The purpose of the study was to determine the social experience of black graduates alumni at a predominantly white research university. The study sought to address the following research areas: (a) common experiences with faculty, students and in relation to the graduate program, (b) the categorization of student experiences, and (c) changes over an elapsed period of time. The mix-methods study collected data with a 72-instrument survey and the qualitative data were collected with a questionnaire. The findings indicated that students experienced the following: (a) white professor discrimination, (b) enforced social isolation, (c) underestimation of academic ability, (d) white student discrimination, and (e) forced representation.

Demographic Factors

Kim and Otts (2010) examined the ways in which financial assistance impacts the time to complete a doctoral degree. Demographic factors including race, program of study, and institutional climate were inspected with respect to the differentiation of time-to-degree and the effect of student loans. The researchers gathered data from the Survey of Earned Doctorates, the National Science Foundation and Integrated Postsecondary Education Data System, and the National Council Education Statistics which provided figures to be used in the reporting of statistical background. The data considering

individual factors were separated into three categories which include: (a) individual variables, (b) education experience, and (c) financial factors.

The findings suggest that students in the humanities were among programs with students taking the longest amount of time to complete a doctoral program. Students in humanities programs took 8.28 years to complete their program. Furthermore, students pursuing doctoral degrees in education took 7.54 years to complete the program. In general, students pursuing graduate study had a higher debt level than students in an undergraduate program. Students pursuing doctoral degrees in the social sciences had the highest level of debt averaging $40,000 to manage to pay for tuition and other associated costs. Among education and humanities students, the average amount of loans ranged from $33,000 to $33,200. Students in engineering borrowed the least amount. In reference to ethnicity, black doctoral recipients had the highest amount of loan debt in the all programs analyzed in the study which include: (a) biological sciences, (b) engineering, (c) physical sciences, (d) social sciences, (e) humanities, and (f) education.

Ellis (2001) examined the extent to which race/ethnicity influences the progress toward degree completion at a predominantly white research institution. The experiences of both black and white doctoral students were assessed in search of a better understanding of race and its effects on degree completion. The participants in the study were black female and black male students who completed a doctoral program between 1993 and 1996. In addition, white female and white male students who completed a doctoral degree between 1999 and 2001 were also selected as participants in this study. Social integration and academic integration were the major focuses of the study. Social

integration is defined as the interaction students have with faculty and peers outside of the classroom, while academic integration focuses on the interaction students have in courses with classmates and faculty.

The findings of this study produced four emerging themes which included: (a) mentoring and advising, (b) the environment of the home department, (c) interaction with peers, and (d) research and teaching. From the research, Ellis gathered that "race appeared to influence whether doctoral students had good relationships with their advisers, and in some cases when they had advisers in their departments" and also, "black women, both currently enrolled students and degree recipients, appeared to be the most isolated group of doctoral students in this study" (p. 40). According to the findings in this study, departments can benefit by being aware of the influence of race on a student's doctoral experience. Diversity training of faculty and administrators may be beneficial in gaining an understanding of the doctoral student experience in the persistence toward doctoral degree completion.

Sampson and Boyer (2001) examined the validity of the Graduate Record Examination (GRE) and whether it serves as a predictor of the success of minority students in graduate school at a research institution. One hundred sixty participants in this study consisted of recipients of master's, specialist, or doctoral degrees during the years of 1988 and 1997, at a research institution. Additionally, these students were awarded fellowships, as assistance toward degree completion. Averages analyzed by the researcher, showed participants scored 447V (verbal), 450GRQ (quantitative), and 470 GRA (analytical) on sections of the Graduate Record Examination. The findings asserted

the notion that the GRE-verbal score, in collaboration with other associated factors, which included; age, major, and undergraduate grade point averages were predictors of first-year success of minority student at a research university. However, the overall GRE was less of a predictor of success of first-year minority students, but more so a determining factor in the admissions process. In addition, findings of this study displayed a strong relationship between first-year and final grade point average for graduate students.

Institutional Physical Resources

Accessibility to technology and university facilities were presented as factors contributing to the graduate student experience. Oswalt and Riddock (2007) examined the extent to which stress influences a student pursuing graduate studies at a large, Southeastern university. Participants included 223 graduate students solicited from the Graduate Student Association database. Also, assistance from graduate program coordinators provided direct contact to students in each program. Participants were graduate students in the College of Arts and Sciences or the College of Education. The purpose of the study was to determine which services the university could provide in order to assist in the reduction of stress levels for graduate students. The open-ended questions posed to participants were used to ascertain how students felt about campus resources in assistance of the management of stress. The questions posed to students were in reference to, "what other services would you like the University Health Center to offer to help reduce/manage your level of stress," and "are there other changes on campus that would reduce your level of stress? If so, please list." Physical environments on

campus gave students stress in reference to the lack of facilities. Students seemed to have insurmountable issues with parking, as it related to looking for a parking space and having to travel far distances from the parking lot to the campus for classes. This was a major frustration for participants in this study. In addition, Oswalt and Riddick (2007) discovered in the research that "students also identified lack of office space with Internet and network access and study locations as additional concerns" (p. 38).

Smith (2000) studied the extent to which graduate students used technology, how faculty integrated technology in the classroom, and the accessibility of technology to graduate students. Nine special education graduate students and 19 faculty members served as participants in this study. Faculty participated in mentoring programs to incorporate technology in the curriculum. Graduate students served as mentors to faculty members to assist in the integration of technology in the classroom. The findings discovered an immediate integration of technology in the classroom. Graduate students indicated increased use of technology with application of integration in the classroom. The study showed the importance of access to technology in the classroom from both the faculty and student perspective.

Student Response to Environmental Distractions

Environmental distractions serve as barriers to students with regard to the completion of a degree and participation in student activities. Bischoping and Bell (1998) examined the differences in university accessibility, specifically by gender. The study took place at York University, which is the third largest institution in Canada. Participants in this study consisted of 826 students, with women responding at a rate of

64.7%. The issue of security on the campus is noted in the study, as participants discussed vital concerns regarding campus safety. The findings suggest that students link campus safety to one of the core reasons for lower levels of satisfaction with the institution. Bishoping and Bell note that "universities need to demonstrate to students (male and female) that they take the issue of campus safety seriously" (p.183). The findings also showed female students having issues with campus safety more than male students. The female students with issues and concerns of campus safety noted not participating in various activities, due to concerns of the lack of security on campus. Female students with safety concerns accounted for 44% of respondents to the survey instrument.

Lerea, Greenberg, Mundy, Harris, Khosla, and Manning (1998) served as members of the University of North Carolina at Chapel Hill Graduate School Campus Safety Task Force. The committee conducted a study on campus safety of students enrolled in both graduate and professional programs. Participants included 937 graduate students enrolled at programs at the University of North Carolina at Chapel Hill. The findings suggested that the top safety concerns for students ranged on a myriad of issues, which included: (a) pedestrian safety, (b) parking/shuttles, (c) lighting, (d) building access, and (e) various miscellaneous concerns. As it relates to pedestrian safety, 874 students had concerns with the safety of pedestrians both during the day and at night. In the context of concern for parking, 456 students saw this as an issue and suggested more on-campus parking, escorts, and shuttles to take students from the parking areas to particular drop offs on campus. Two hundred seventy-eight students felt lighting on

campus was an issue and contributed to the deficiency of campus safety. Suggestions for improving lighting were to place more lighting in bus stop areas, walkways, and parking lots. One-hundred seventy six participants suggested having access to building after hours, adding emergency phones, and more police patrols. Students (280) outlined a various amount of miscellaneous concerns on campus which include information dissemination, security cameras, sexual assault, self-defense classes, library safety, and increasing police presence. Due to the fact that graduate students are traditionally on campus in the evenings, concerns for this population of students may differ from the concerns of an undergraduate population. The task force was able to provide recommendations for campus enhancements as it related to the security of students on campus.

Academic Peer Support

Allan and Dorry (2001) conducted a study on factors that lead to doctoral attrition for students in the Doctor of Professional Studies (DPS) program at the Lubin School of Business at Pace University. The three objectives in the research were to determine if previously cited research discussing the factors which impede doctoral students was relevant to students in the DPS program at Pace University. Thus, the researchers sought to determine if factors beyond what had previously been determined were also impediments for the lack of completion of a doctoral degree. Finally, the study sought to discover suggestions improvement of doctoral attrition rates as made paramount by students. The research involved 97 graduates and 146 nongraduates of the program. Participants selected for the study were former students of the program between 1978

until 1998. The instrumentation developed for the survey was composed of 42-items; a survey was developed for graduates and a different study for non-graduates. As it related to academic peer support, the findings (Allen & Dorry, 2001) reported that "lack of peer support has also impeded students in their effort to complete the doctoral degree . . . absence of peer support contributes to a sense of isolation and deprives students of potentially valuable input" (p. 2). Participants recommended that the department foster an environment to allow students opportunities for more activities and development of beneficial networks.

Summary

This chapter provided an in-depth examination of literature as it relates to several factors affecting graduate student persistence. Previous research examined many factors which related to both institutional and personal factors in graduate student persistence. Poor relationships with advisors, the lack of structure, financial constraints and loss of motivation are the emphasis of much of the research related to attrition and persistence at the graduate level. This chapter culminated the review of literature of previous research studied on these variables. Additional variables were further examined as it related to the relevance of the study.

CHAPTER III

THEORETICAL FRAMEWORK

Introduction

This chapter expands on the nature of the study. This research was designed to identify the significance between factors influencing graduate student persistence at an urban research institution in the Southeast region of the United States. Principally, this research investigated ten key elements which affect graduate student persistence at an urban research institution which include: (a) demographic factors, (b) program advisement, (c) research advisement, (d) financial aid status, (e) student involvement and socialization, (f) family and peer support, (g) institutional physical resources, (h) student response to environmental distractions, (i) student response to academic structure, and (j) academic peer support. These factors were identified to determine the significance of the effect on graduate student persistence as it related to attrition. In addition, Figure 1 categorizes variables of the research. Chapter three includes the outline of variables, definitions of variables, pertinent terms, relationship amid the independent and dependent variable, and the summary of the section.

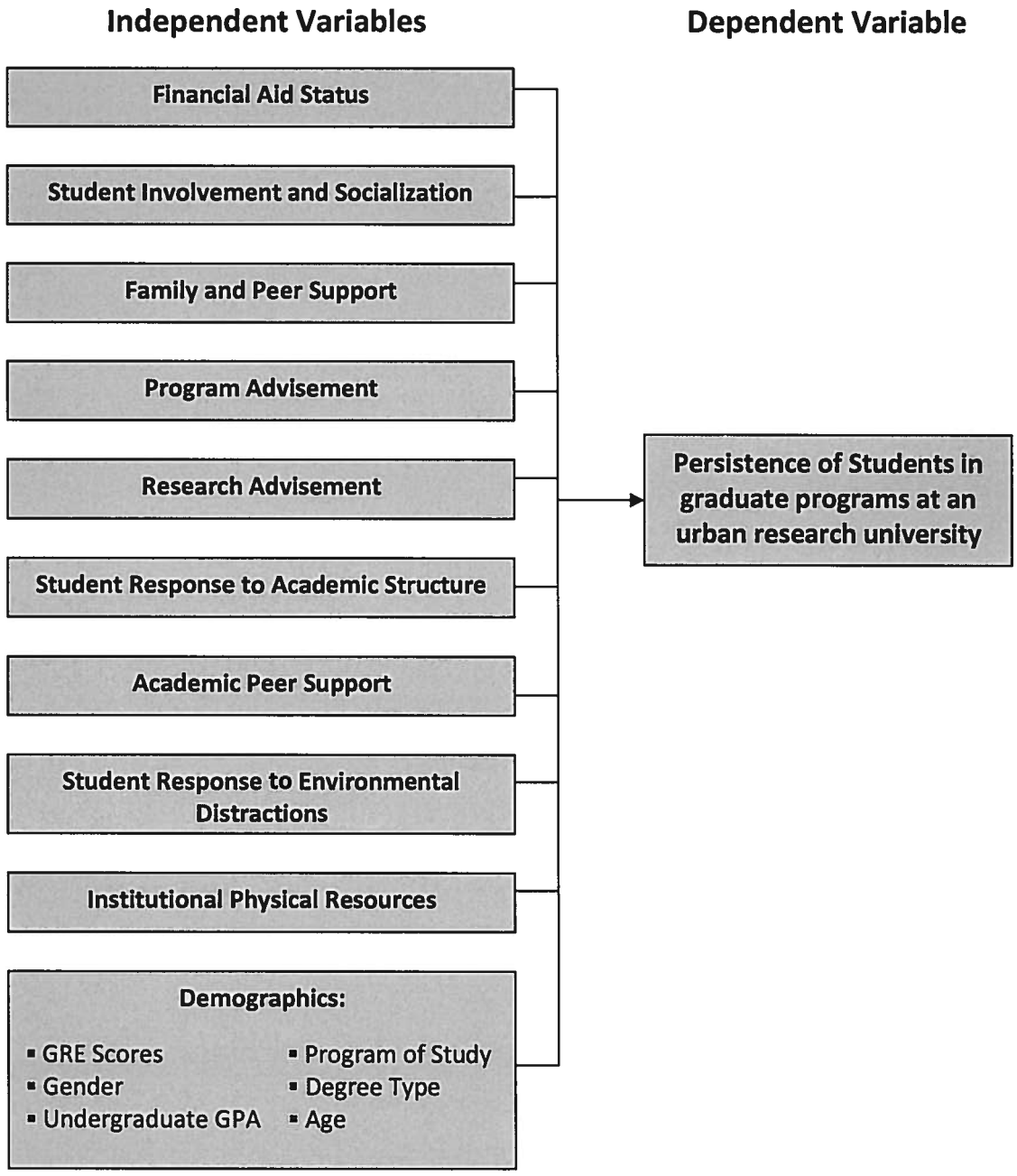

Figure 1. Diagram of Variables

Definition of Variables and Pertinent Terms

Dependent Variable

The definition of the dependent variable is explained as the variable measured by the number of students who demonstrate the likelihood to stay the course to graduation or not, in graduate programs at an urban research institution in the Southeastern region of the United States.

Independent Variables

The independent variables in this study include: demographic factors, program advisement, research advisement, financial aid status, student socialization and involvement, family and peer support, institutional physical resources, student response to environmental distractions, student response to academic structure, and academic peer support.

Demographic Factors: The extent to which race, age, program of study, undergraduate GPA, gender, and GRE scores have an influence on graduate student persistence and completion of degree.

Program Advisement: Refers to the advisement provided to the student by the assigned advisor within the department. This interaction includes the relationship during the matriculation of students through coursework.

Research Advisement: Refers to the advisement provided to the student by the dissertation or thesis advisor within the department. This interaction includes the relationship throughout the dissertation/thesis stage (specifically in reference to doctoral programs/master's programs requiring thesis).

Financial Aid Status: The extent to which financial aid status has an influence on graduate student persistence and completion of degree.

Student Socialization and Involvement: The extent to which the levels of active engagement of graduate students outside of the classroom relates to graduate student persistence. For this study, socialization is categorized as participation in student activities, participation in student organizations, and the informal collaboration of student interaction beyond the classroom.

Family Support and Peer Support: The extent to which the type of support received from family members assists in completion of a degree for students throughout the graduate program. For this study, family support is considered as emotional and financial support.

Institutional Physical Resources: The extent to which the condition of campus facilities and accessibility to technology has an effect on graduate student persistence. For this study, availability of technology and accessibility to research materials is considered.

Student Response to Environmental Distractions: The extent to which to the student's response to environmental campus distractions has an effect on graduate student persistence. For this study, both campus safety and security are considered as environmental distractions, due to the nature of the time graduate student classes are offered and available.

Student Response to Academic Structure: The extent to which the outline of the graduate program, as determined by the institution, affects graduate student

persistence. Moreover, students must follow a program of study to lead to completion of a graduate degree. For this study, the academic structure is determined as the quality of instruction, the clarity of the programmatic outline, and the ease with which the student can navigate through the program toward completion of a graduate degree.

Academic Peer Support: The extent to which the support provided by academic peers effects graduate student persistence. For purposes of this study, encouragement and collaboration from classmates within the graduate program is considered.

Pertinent Terms

All but dissertation (ABD): Students who leave the university after completing coursework, but not satisfying the completion of the dissertation.

Attrition rates: The percentage of students who leave the university without completion of a degree.

Completer: A doctoral student who begins a program of study with successful completion.

Comprehensive Exam: An exam used to determine competency of content in graduate level degree programs.

Degree attainment: The successful completion of a degree program.

Dissertation: A research document completed by doctoral students, which must be presented successfully before a doctoral degree can be awarded.

Doctoral degree: The highest level of degree offered at the collegiate level, which requires coursework and the completion of a dissertation.

Dropouts: Students who leave the university without completing required coursework and/or dissertation and do not return.

Ethnicity: The classification of one's racial background as recorded by Census Bureau.

Gender: The classification of an individual as a male or female

Graduate Student: Classified as a student pursuing a degree at the masters, specialist, or doctoral level.

Graduation rates: The percentage of degrees conferred by a university.

Graduate Record Exam (GRE): Examination used as a determining factor in the graduate admissions process.

Grade point average (GPA): The calculation of courses and credit hours used to determine student rank in class.

Historically Black College and University (HBCU): A college or university founded by African Americans, generally serving the same demographic within a historical context and mission.

Hispanic Serving Institution (HSI): A college of university with a predominantly Hispanic population.

Master's degree: Graduate level program beyond a bachelor's degree.

Non-completer: A doctoral student who begins a program of study, but does not graduate.

Persistence: Student behavioral patterns which lead to completion of a degree.

Predominantly White Institution (PWI): A college or university with a predominantly white population.

Socialization: The engagement of students in a social setting within the academic and social context.

Specialist's degree: A graduate level degree beyond the master's, typically offered in educational programs.

Stop out: A student who leaves school for a period of time.

Thesis: A document used as a component of completion for some masters programs.

Relationship among Variables

The attainment of a graduate degree is a communal effort, whereby both the student and institution are held to a great standard of accountability. Graduate student persistence is increasingly becoming more recognized as an area of concern for higher education institutions. The issue of attrition has, in the past, been linked directly to the undergraduate student population, which leaves graduate students feeling isolated and unimportant (McLaughlin & Tierney, 1993). Institutions have slowly begun to recognize the need for graduate student support services. The core concepts of investing resources in programs, student support services, and environmental enhancements to alleviate distractions are essential to ensure a focused emphasis on the learning environment.

The independent variables for this study have been selected to determine whether there is a significant relationship between each of them and the affect had on graduate student persistence. The selected variables for the research include: (a) demographic

factors, (b) program advisement, (c) research advisement, (d) financial aid status, (e) student involvement and socialization, (f) family and peer support, (g) institutional physical resources, (h) student response to environmental distractions, (i) student response to academic structure, and (j) academic peer support. Socialization contributes to the overall graduate experience. Thus, the inclusion amongst peers can create a positive environment beyond the classroom. The likelihood of students staying connected to a graduate program is evident when they interact with peers beyond the academic environment. This is an important construct of persistence. The support of the family unit throughout a graduate degree program is another factor which has significant value. Receiving reinforcement and encouragement from family members can contribute to a positive graduate student experience. Additionally, the academic structure sets the foundation for student navigation through the program. The quality of instruction and clarification of the program outline creates a seamless roadmap for completion of the degree. Delineated expectations, provided by the department, create clear objectives of the requirements necessary to persist toward completion. The advisement component of a graduate program is vital to student persistence. The formulation of positive advisor/advisee relationships contributes to open communication, accessibility of scheduling, and feedback throughout the dissertation stage. On the contrary, poor advisor/advisee relationships can also have a grave impact on student persistence. The level of safety and security on campus may also contribute to a student's decision to continue to receive an education at a particular institution. This is a critical factor which institutions should continue to exam thoroughly. Furthermore, there are several

significant factors which impede the completion of a graduate program. Myers (1999) asserts the notion that the barriers prohibiting students from completion of graduate programs include three components; student motivation, timeframe of dissertation, and accommodations of the academic committee.

The enormous decision to pursue a graduate program is one which involves a great deal of obligation, dedication, and intrinsic motivation (Hegarty, 2011; Garner, Hayes, & Neider, 2006). The student must possess certain characteristics to maximize the graduate experience and also to gain the knowledge, skills, and dispositions necessary to persist toward completion of a graduate level program. Individuals are likely to engage in endeavors where the desired level of competency is positive. As it relates to the educational setting, scholars are more likely to attempt, persist, and be effective at tasks at which they have a sense of value (Bardura, 1977). The completion of the degree is not only of benefit to the institution, but is of great importance to the completer. By persisting toward degree completion, students acquire personal fulfillment and a wealth of uncharted opportunities. The value of attaining a graduate degree permeates far beyond completion of the program.

Summary

This chapter examined the specified definitions of terms applicable to the study. The variables in this study were selected to further investigate the significance of factors which may have been seen to influence graduate student persistence toward graduate degree completion. Additionally, the chapter provided the theoretical framework and a foundational construct for the research. The explanation of variables, definitions

pertinent to the research and diagram of the theoretical framework are included to further classify the basis for the research.

CHAPTER IV

RESEARCH METHODOLGY

Introduction

The purpose of this study was to identify key factors which may affect persistence of students in graduate programs at an urban research institution in the Southeast region of the United States. This chapter provides an in-depth explanation of the research design, description of setting, participant selection, instrumentation, and data collection procedures for the use of mixed methods methodology.

Research Design

This study utilized the mixed methods approach. In the quantitative portion of this study, the quantitative ex-post facto research design was incorporated. This study used the Pearson's Correlation Coefficient to determine the level of relationship between persistence of graduate students and the selected independent variables. Additionally, the study utilized *t*-test, ANOVA, and Frequency distributions for the purpose of analyzing the data. The accepted level of probability to test the significance of the relationship was .05. According to Stockburger (2001):

> The Pearson Product-Moment Correlation Coefficient (r), or correlation coefficient for short is a measure of the degree of linear relationship between two variables, usually labeled X and Y. While in regression the emphasis is on

> predicting one variable from the other, in correlation the emphasis is on the degree to which a linear model may describe the relationship between two variables. (p. 73)

For the qualitative portion of the study, data were obtained through descriptive notes and recorded interactions from two focus group sessions, direct site observations, and personal interviews with students in graduate programs at an urban research institution. The researcher utilized the case study method for the qualitative data collection methods. Any and all methods of collecting data from testing to interviewing can be used in a case study; however, certain techniques are used more than others (Merriam, 1998).

The research occurred at an urban research institution in the Southeastern region. Data collection took place with a 38-item survey instrument and 5 demographic items. The instrument was administered to master's, specialist, and doctoral students in graduate programs at the institution. The data were analyzed after the instrumentation was distributed and collected from the participants in the study. The goal of the research design was to determine the significance of a relationship between selected independent variables and the dependent variable as it relates to graduate student persistence.

Description of the Setting

An urban research institution located in the Southeastern region of the United States was selected as the environment for gathering of the research. The survey instrument was administered to students currently enrolled in graduate programs at an urban research institution. The description of the institution utilized in the study follows.

Institutional Description

This institution is located in a metropolitan city in the Southeastern region of the United States. During the 2011-12 academic year, the university had an overall population of 3,941 students. More specifically, the graduate population is comprised of 674 students. Currently in 2012, the university offers several graduate programs with a variety of majors. Students are able to pursue degrees at the master's, specialist, and doctoral levels. The School of Arts and Sciences offers master's programs in the following disciplines: African-American Studies, Africana Women's Studies, Biology, Chemistry, Computer Information Systems, Criminal Justice, English, Foreign Languages, History, Mathematical Sciences, Physics, Political Science, Public Administration, and Sociology. Students may also pursue doctoral degrees in the following disciplines: African-American Studies, Africana Women's Studies, Biology, Chemistry, English, Romance Languages, History, and Political Science. The School of Business Administration offers master's programs in the following disciplines: Accounting, Supply Chain Management, Economics, Finance, and Marketing. The School of Social Work offers masters programs in the following disciplines: Families and Children, Health & Mental Health. Additionally, students may pursue a doctoral degree in Social Work Planning, Policy, and Administration. The School of Education offers masters programs in the following disciplines: Educational Leadership, Exceptional Education, Broad Field Science, Secondary Mathematics, School Counseling and Community Counseling. Students are able to pursue a Specialist degree in

Educational Leadership. Additionally, students interested in pursuing a doctoral degree, may do so in the area of Educational Leadership.

Sampling Procedures

Convenience sampling was used for purposes of gathering participants for this study. A convenience sample is essentially conducting research with participants that are available and willing to contribute at the time of the study. The study primarily focused on students who began in graduate programs between the years 2005 and 2009 in each discipline (Business, Arts and Sciences, Education, and Social Work). The researcher administered the survey to all students who began graduate programs between 2005 through 2009 at the institution selected for data collection. Stratified sampling was then utilized to create a representative population. Stratified sampling is defined as "the population is divided into subpopulations (strata) and random samples are taken of each stratum" (*Free Dictionary*, 2011). In this study, the survey was administered to all students who began programs between 2005 through 2009 at the urban research institution. The sample was then stratified by graduate program (Education, Business, Arts and Sciences, and Social Work), and then selection was made from within each stratum. The researcher administered the survey electronically, with an invitation to students requesting participation in the study. The researcher also administered additional surveys in the paper format.

Working with Human Subjects

The researcher maintained the integrity of confidentiality of the participants and survey instrument responses. Students were informed of the confidentiality agreement

with the administration of the survey. Prior to administering the survey, the researcher provided the background and purpose of the survey to inform all participants.

Instrumentation

The researcher developed the survey instrument in collaboration with the dissertation committee, which consisted of questions related to selected variables and the significance of key factors affecting graduate student persistence. Items 1-4, on the survey related were directly related to the independent variable program advisement, 5-6 on the survey were directly indicated to measure the independent variable of research advisement, as it relates to graduate student persistence. Items 7-8 on the survey were directly indicated to measure the independent variable of financial aid status, as it relates to graduate student persistence. Items 9-10 on the survey were directly related to additional demographic factors, as it relates to graduate student persistence. Items 11-14 on the survey were directly indicated to measure the independent variable of student socialization and involvement. Items 15-19 on the survey were directly indicated to measure the independent variable of family and peer support, as it relates to graduate student persistence. Items 20-22 on the survey were directly indicated to measure the independent variable of institutional physical resources. Items 23-25 on the survey are directly indicated to measure the independent variable of student response to environmental distractions. Items 26-30 on the survey were directly indicated to measure the independent variable of student response to academic structure. Items 31-35 on the survey were directly indicated to measure the dependent variable which is defined as the intent of students to persist toward graduation. Items 36-38 on the survey were directly

related to measure the independent variable of academic peer support. The survey was developed for student responses on a five-point scale, known as the Likert-scale. The framework for the instrument provided participants with five responses which included: (a) strongly agree, (b) agree, (c) uncertain, (d) disagree, and (e) strongly disagree. The numerical rating was used to calculate participant responses on the survey instrument. The survey was submitted for approval to the institution review board prior to administration of the instrument.

Reliability and Validity

The variables were subject to Item-to-Scale correlation analysis to test for construct validity, and the Cronbach's Alpha was used to test for reliability. The dependent variable, persistence, was shown to have strong construct validity with an overall coefficient of .833 with all items correlating with the overall variable at the significance level of .000 (see Appendix A, Table A1) and with strong reliability with an index of .684 (see Table 5). The independent variable, program advisement, was shown to have strong construct validity with an overall coefficient of .899 with all items correlating with the overall variable at the significance level of .000 (see Appendix A, Table A2) and with strong reliability with an index of .837 (see Table 5). The independent variable, research advisement, was shown to have strong construct validity with an overall coefficient of 1.00 with all items correlating with the overall variable at the significance level of .000 (see Appendix A, Table A3) and with moderate reliability with an index of .506 (see Table 5).

Table 5

Reliability Tests

Variable	Cronbach's Alpha	Number of Items
Persistence	.684	6
Program Advisement	.837	5
Research Advisement	.506	3
Student Socialization/Involvement	.811	5
Financial Aid Status	.866	3
Family and Peer Support	.584	6
Institutional Physical Resources	.626	4
Environmental Distractions	.733	4
Academic Structure	.784	6
Academic Peer Support	.865	4

The independent variable, student socialization and involvement, was shown to have strong construct validity with an overall coefficient of .810 with all items correlating with the overall variable at the significance level of .000 (see Appendix A, Table A4) and with strong reliability with an index of .811 (see Table 5). The independent variable, financial aid status, was shown to have strong construct validity with an overall coefficient of .831 with all items correlating with the overall variable at the significance level of .000 (see Appendix A, Table A5) and with strong reliability with an index of .866 (see Table 5). The independent variable, family and peer support, was shown to

have strong construct validity with an overall coefficient of .831 with all items correlating with the overall variable at the significance level of .000 (see Appendix A, Table A6) and with moderate reliability with an index of .584 (see Table 5). The independent variable, institutional physical resources, was shown to have strong construct validity with an overall coefficient of .601 with all items correlating with the overall variable at the significance level of .000 (see Appendix A, Table A7) and with strong reliability with an index of .626 (see Table 5). The independent variable, student response to environmental distractions, was shown to have strong construct validity with an overall coefficient of .303 with all items correlating with the overall variable at the significance level of .001 (see Appendix A, Table A8) and with strong reliability with an index of .733 (see Table 5). The independent variable, student response to academic structure, was shown to have strong construct validity with an overall coefficient of .608 with all items correlating with the overall variable at the significance level of .000 (see Appendix A, Table A9) and with moderate reliability with an index of .784 (see Table 5). The independent variable, academic peer support, was shown to have strong construct validity with an overall coefficient of .889 with all items correlating with the overall variable at the significance level of .000 (see Appendix A, Table A10) and with moderate reliability with an index of .865 (see Table5).

Data Collection Procedures

The following procedures were used to collect data from the participants in this research:

1. The researcher checked the validity and reliability of the survey instrument with the doctoral dissertation committee.
2. The researcher submitted the survey instrument to the Institution Review Board (IRB) for approval to conduct research.
3. The researcher identified a contact person within each program who assisted in the administration of the survey instrument.
4. The researcher loaded the survey instrument in the software package Survey Monkey and received a fixed link, used to administer the online survey.
5. The researcher received completed surveys electronically via Survey Monkey software.
6. The researcher entered all responses received via paper surveys into Survey Monkey for analysis.
7. The researcher downloaded responses from the survey instrument into a workable spreadsheet program.
8. The researcher conducted two focus group interviews at a designated location.
9. The researcher conducted three direct observation site visits.
10. The researcher conducted three personal interviews via telephone.
11. The researcher analyzed the data and compiled for the results section of the study.

Statistical Applications

The quantitative data were analyzed using the Statistical Package for the Social Sciences (SPSS). The program provided the necessary tools to further analyze the

responses gathered from the survey instrument, regarding graduate student persistence. The qualitative data were analyzed with the identification of emerging themes.

Limitations of the Study

This study focused on only one urban research institution located in the Southeastern region of the United States. Additionally, the research focused specifically on graduate students pursuing Education, Business, Arts and Sciences, and Social Work degree programs. Furthermore, the data were self-reported, which could have indicated levels of bias. The discrepancy in the actual sizes of the graduate programs was also a limitation of the research. The research focused on one historically black college and university, which minimized the variance of ethnic backgrounds as participants. Further, the researcher is a student in one of the programs examined in the study.

Summary

This chapter examined the design of the research. Further, it provided clarity of the quantitative methodology, which was used to determine the significance level of selected independent variables and the effects on graduate student persistence. The researcher sought to determine factors affecting graduate student persistence with the use of mixed methods study. Participants in the research completed a 38-item survey instrument, which was designed to gather data on selected variables. Additionally, the researcher conducted focus groups, direct observations, and personal interviews to complement the qualitative piece of the study. The researcher analyzed the collected data and prepared the findings, which are further explained throughout the following chapters of the study.

CHAPTER V

ANALYSIS OF THE DATA

Introduction

The purpose of this study was to identify key factors which may affect persistence of students in graduate programs at an urban research institution in the Southeastern region of the United States. The data analysis process was based on the research questions derived from the theoretical framework which concentrated on determining the relationship among the independent variables: (a) demographic factors, (b) program advisement, (c) research advisement, (d) financial aid status, (e) student socialization and involvement, (f) family and peer support, (g) institutional physical resources, (h) student response to environmental distractions, (i) student response to academic structure, and (j) academic peer support. The dependent variable is graduate student persistence. This chapter presents the results of the data analysis of both the quantitative and qualitative data respectively.

Quantitative Data Analysis

The researcher collected a total of 126 surveys from participants enrolled during the 2011-2012 academic year, who began in graduate programs between the years 2005 and 2009, at an urban research institution located in a metropolitan city in the Southeastern region of the United States. In addition to the selected variables as they related to graduate student persistence, the survey also included questions concerning

gender (male or female), program of study (Business, Education, Arts and Sciences, or Social Sciences), degree type (Master's, Specialist or Doctoral), race (Asian/Pacific Islander, Black/African American, Hispanic, Native American, White or Other), and age (21-25, 26-31, 32-37, 38-43 or 44 and older). The survey consisted of 38 questions representing independent variables: program advisement (survey items 1-4), research advisement (survey items 5-6), financial aid status (survey items 7-8), additional demographic factors (survey items 9-10), student socialization and involvement (survey items 11-14), family and peer support (survey items 15-19), institutional physical resources (survey items 20-22), environmental distractions (survey items 23-25), academic structure (survey items 26-30), and academic peer support (survey items 36-38) as well as the dependent variable: graduate student persistence (survey items 31-35). Items were developed on the survey and measured utilizing a Likert-scale with the following response options: (a) strongly agree, (b) agree, (c) uncertain, (d) disagree, and (e) strongly agree. Summary analysis was conducted utilizing SPSS software. Frequency, Pearson correlation, ANOVA and *t*-test statistical procedures were utilized. The survey results were studied and displayed in tables where indicated.

Of the 126 participants in this research study, the following demographic factors were noted. There were 49 male participants and 77 female participants (see Table 6). As noted in Table 7, participants in the study were fairly evenly disbursed by program. The breakdown of participants by program consisted of 31 students pursuing a graduate degree in Business, 32 students pursuing a graduate degree in Education, 32 students pursuing a graduate degree in the School of Arts and Sciences, and 31 students pursuing a degree in Social Work.

Table 6

Participants by Gender

Gender	Frequency	Percent	Cumulative Percent
Male	49	38.9	38.9
Female	77	61.1	100.0
Total	126	100.0	

Table 7

Participants by Program of Study

Value	Frequency	Percent	Cumulative Percent
Business	31	24.6	24.6
Education	32	25.4	50.0
Arts and Sciences	32	25.4	75.4
Social Work	31	24.6	100.0
Total	126	100.0	

Participants in the research were analyzed by degree type. Table 8 shows that there were 54 students enrolled in a Master's degree program and 72 students enrolled in a Doctoral degree program. There were no respondents in a Specialist degree program.

Table 8

Participants by Degree Type

Value	Frequency	Percent	Cumulative Percent
Master's	54	42.9	42.9
Doctoral	72	57.1	100.0
Total	126	100.0	

The breakdown of participants by racial/ethnic background consisted of; 107 students who identified their background as black/African-American, 2 students who identified their background as Hispanic, and 17 students who identified their background as other (see Table 9).

Table 9

Participants by Racial/Ethnic Background

Value	Frequency	Percent	Cumulative Percent
Black/African American	107	84.9	84.9
Hispanic	2	1.6	86.5
Other	17	13.5	100.0
Total	126	100.0	

Table 10 displays the distribution of participants by age range. The breakdown of participants by age range consisted of; 15 students between the ages of 21 to 25, 48 students between the ages of 26 to 21, 47 students between the ages of 32-37, 15 students between the ages of 38 to 43, and 1 student age 43 or older.

Table 10

Participants by Age Range

Age Range	Frequency	Percent	Cumulative Percent
21 - 25	15	11.9	11.9
26 - 31	48	38.1	50.0
32 - 37	47	37.3	87.3
38 - 43	15	11.9	99.2
43 or older	1	.8	100.0
Total	126	100.0	

Research Questions

With regard to the statement of the problem, and in accordance with the purpose of the study, the following research questions were formulated to guide this study.

RQ1: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *demographic factor (a) race?*

From Table 11, it can be seen that there is no relationship between the persistence of students in graduate programs at an urban research institution and race. The table shows the coefficient of .153 and the level of significance as .088; this is above the acceptable level of .05, indicating no significant relationship.

RQ1: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *demographic factor (b) age*?

Table 11

Correlations: Persistence and Demographics for Research Question 1

		Persistence	Program	Race	Age	GRE	Undergraduate GPA
Persistence	Pearson Correlation	1	.010	.153	.250**	-.025	.006
	Sig. (2-tailed)		.913	.088	.005	.803	.945
	N	125	125	125	125	103	124

From Table 11, it can be seen that there is a significant relationship between the persistence of students in graduate programs at an urban research institution and age. The table shows the coefficient of .250 and the level of significance as .005; this is below the acceptable level of .05, indicating a significant relationship between persistence and age.

RQ1: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *demographic factor (c) program of study*?

From Table 11, it can be seen that there is no relationship between the persistence of students in graduate programs at an urban research institution and program of study. The table shows the coefficient of .010 and the level of significance as .913; this is above the acceptable level of .05, indicating no significant relationship.

RQ1: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *demographic factors (d) undergraduate GPA*?

From Table 11, it can be seen that there is no relationship between the persistence of students in graduate programs at an urban research institution and undergraduate GPA. The table shows the coefficient of .006 and the level of significance as .945; this is above the acceptable level of .05, indicating no significant relationship.

RQ1: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *demographic factors (e) gender*?

From Table 11, it can be seen that there a significant relationship between the persistence of students in graduate programs at an urban research institution and gender. The table shows .01 as the level of significance. A *t*-test was conducted to determine that male graduate students displayed a higher level of persistence.

RQ1: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *demographic factor (f) GRE score*?

From Table 11, it can be seen that there is no relationship between the persistence of students in graduate programs at an urban research institution and GRE score. The table shows the coefficient of -.025 and the level of significance as .803; this is above the acceptable level of .05, indicating no significant relationship.

RQ2: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *program advisement*?

From Table 12, it can be seen that there is a significant relationship between the persistence of students in graduate programs at an urban research institution and program advisement. The table shows the coefficient of .371 and the level of significance as .00; this is below the acceptable level of .05, indicating a strong relationship between persistence and program advisement.

Table 12

Correlations: Persistence and Independent Variables

		Pers	ProgAd	ResAd	FinAid	StudSocillInv
Persistence	Pearson Correlation	1	.371**	.062	.029	.273**
	Sig. (2-tailed)		.000	.563	.748	.002
	N	125	125	88	124	122
		FamPeerSu	PhysRes	EnvDistr	AcdStruct	AcdPeerSupp
Persistence	Pearson Correlation	.275**	.130	.047	.559**	.589**
	Sig. (2-tailed)	.002	.153	.601	.000	.000
	N	124	122	124	123	124

RQ3: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *research advisement?*

From Table 12, it can be seen that there is no relationship between the persistence of students in graduate programs at an urban research institution and research advisement. The table shows the coefficient of .062 and the level of significance as .56; this is above the acceptable level of .05, indicating no relationship between persistence and research advisement.

RQ4: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *financial aid status*?

From Table 12, it can be seen that there is no relationship between the persistence of students in graduate programs at an urban research institution and financial aid status. The table shows the coefficient of .029 and the level of significance as .74; this is above the acceptable level of significance .05, indicating no relationship between persistence and financial aid status.

RQ5: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *student socialization and involvement*?

From Table 12, it can be seen that there is a significant relationship between the persistence of students in graduate programs at an urban research institution and student socialization and involvement. The table shows the coefficient of .273 and the level of significance as .00; this is below the acceptable level of significance .05, indicating a strong relationship between persistence and student socialization and involvement.

RQ6: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *family and peer support*?

From Table 12, it can be seen that there is a significant relationship between the persistence of students in graduate programs at an urban research institution and family and peer support. The table shows the coefficient of .275 and the level of significance as

.002; this is below the acceptable level of significance .05, indicating a strong relationship between persistence and family and peer support.

RQ7: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *institutional physical resources*?

From Table 12, it can be seen that there is no relationship between the persistence of students in graduate programs at an urban research institution and institutional physical resources. The table shows the coefficient of .130 and the level of significance as .153; this is above the acceptable level of significance .05, indicating no relationship between persistence and institutional physical resources.

RQ8: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *student response to environmental distractions*?

From Table 12, it can be seen that there is no relationship between the persistence of students in graduate programs at an urban research institution and student response to environmental distractions. The table shows the coefficient of .047 and the level of significance as .601; this is above the acceptable level of significance .05, indicating no relationship between persistence and student response to environmental distractions.

RQ9: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *student response to academic structure*?

From Table 12, it can be seen that there is a significant relationship between the persistence of students in graduate programs at an urban research institution and student

response to academic structure. The table shows the coefficient of .559 and the level of significance as .000; this is below the acceptable level of significance .05, indicating a strong relationship between persistence and student response to academic structure.

RQ10: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *academic peer support*?

From Table 12, it can be seen that there is a significant relationship between the persistence of students in graduate programs at an urban research institution and academic peer support. The table shows the coefficient of .589 and the level of significance as .000; this is below the acceptable level of significance .05, indicating a strong relationship between persistence and academic peer support.

RQ11: Is there a significant difference among the four selected programs on the persistence of graduate students?

From Table 13, it can be seen that there is no significant difference among the four selected programs of the persistence of graduate students at an urban research institution. The table shows the level of significance as .101; this is above the acceptable level of significance .05, indicating no difference among the four selected programs on the level of persistence of graduate students by program.

Table 13

ANOVA: Persistence by Program of Study

					95% Confidence Interval for Mean	
Program	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound
Business	30	2.53	.629	.115	2.30	2.77
Education	32	2.47	.915	.162	2.14	2.80
A&S	32	2.91	.689	.122	2.66	3.15
Social Work	31	2.45	.568	.102	2.24	2.66
Total	125	2.59	.731	.065	2.46	2.72

	Sum of Squares	Df	Mean Square	F	Sig
Between Groups	4.360	3	17.054	2.118	.101
Within Groups	974.327	121	8.052		
Total	1025.488	124			

RQ12: Is there a significant difference among the four selected programs on the *selected independent variables*?

Program Advisement: From Table 14 it can be seen that there is a significant difference among the four selected programs and program advisement. The table shows the level of significance as .000; this is below the acceptable level of significance .05, indicating a difference among the four selected programs on program advisement.

Research Advisement: From Table 14, it can be seen that there is a significant difference among the four selected programs and research advisement. The table shows the level of significance as .000; this is below the acceptable level of significance .05, indicating a difference among the four selected programs on research advisement.

Table 14

ANOVA: Persistence by Independent Variables

		Sum of Squares	df	Mean Square	F	Sig.
ProgramAdvise	Between Groups	549.876	3	183.292	9.583	.000
	Within Groups	2333.552	122	19.127		
	Total	2883.429	125			
ResearchAdvise	Between Groups	52.080	3	17.360	9.499	.000
	Within Groups	153.511	84	1.828		
	Total	205.591	87			
FinancialAid	Between Groups	9.260	3	3.087	1.779	.155
	Within Groups	209.940	121	1.735		
	Total	219.200	124			
StudSocIllInvolve	Between Groups	128.574	3	42.858	3.054	.031
	Within Groups	1670.125	119	14.035		
	Total	1798.699	122			
FamPeerSupport	Between Groups	18.914	3	6.305	.975	.407
	Within Groups	776.078	120	6.467		
	Total	794.992	123			
PhysicalRes	Between Groups	44.944	3	14.981	3.877	.011
	Within Groups	459.804	119	3.864		
	Total	504.748	122			
EnvDistract	Between Groups	9.739	3	3.246	.659	.579
	Within Groups	596.213	121	4.927		
	Total	605.952	124			

(continued)

Table 14 (continued)

		Sum of Squares	df	Mean Square	F	Sig.
AcadStructure	Between Groups	231.474	3	77.158	5.288	.002
	Within Groups	1736.379	119	14.591		
	Total	1967.854	122			
AcadPeerSupport	Between Groups	32.774	3	10.925	1.717	.167
	Within Groups	770.026	121	6.364		
	Total	802.800	124			

Financial Aid Status: From Table 14, it can be seen that there is no significant difference among the four selected programs and financial aid status. The table shows the level of significance as .155; this is above the acceptable level of significance .05, indicating no difference among the four selected programs on financial aid status.

Student Socialization and Involvement: From Table 14, it can be seen that there is no significant difference among the four selected programs and student socialization and involvement. The table shows the level of significance as .031; this is above the acceptable level of significance .05, indicating no difference among the four selected programs on student socialization and involvement.

Family and Peer Support: From Table 14, it can be seen that there is no significant difference among the four selected programs and family and peer support. The table shows the level of significance as .407; this is above the acceptable level of significance .05, indicating no difference among the four selected programs on family and peer support.

Institutional Physical Resources: From Table 14, it can be seen that there is a significant difference among the four selected programs and institutional physical resources. The table shows the level of significance as .011; this is below the acceptable level of significance .05, indicating a strong difference among the four selected programs on institutional physical resources.

Student Response to Environmental Distractions: From Table 14, it can be seen that there no significant difference among the four selected programs and student response to environmental distractions. The table shows the level of significance as .579; this is above the acceptable level of significance .05, indicating no difference among the four selected programs on student response to environmental distractions.

Student Response to Academic Structure: From Table 14, it can be seen that there is a significant difference among the four selected programs and student response to academic structure. The table shows the level of significance as .002; this is above the below the level of significance .05, indicating a significant difference among the four selected programs on student response to academic structure.

Academic Peer Support: From Table 14, it can be seen that there is no significant difference among the four selected programs and academic peer support. The table shows the level of significance as .167; this is above the above the level of significance .05, indicating no significant difference among the four selected programs on academic peer support.

In order to determine where the differences were indicated among programs, a Post-Hoc Analysis was conducted (see Table 15). Numerical values were assigned to each program of study.

Table 15

Post-Hoc Test of ANOVA – Multiple Comparisons

Dependent Variable	(I) Program	(J) Program	(I-J) Mean Difference	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
ProgramAdvise	1	2	-1.17944	1.21768	.915	-4.4959	2.1370
		3	-3.99194*	1.01947	.001	-6.7650	-1.2189
		4	1.74194	1.01265	.434	-1.0141	4.4980
	2	1	1.17944	1.21768	.915	-2.1370	4.4959
		3	-2.81250	1.17941	.117	-6.0285	.4035
		4	2.92137	1.17352	.091	-.2802	6.1230
	3	1	3.99194*	1.01947	.001	1.2189	6.7650
		2	2.81250	1.17941	.117	-.4035	6.0285
		4	5.73387*	.96630	.000	3.1064	8.3614
	4	1	-1.74194	1.01265	.434	-4.4980	1.0141
		2	-2.92137	1.17352	.091	-6.1230	.2802
		3	-5.73387*	.96630	.000	-8.3614	-3.1064
FinancialAid	1	2	.54839	.38268	.642	-.4944	1.5912
		3	-.11492	.36501	1.000	-1.1116	.8817
		4	.38710	.34803	.850	-.5669	1.3411
	2	1	-.54839	.38268	.642	-1.5912	.4944
		3	-.66331	.31886	.226	-1.5309	.2043
		4	-.16129	.29926	.995	-.9777	.6551
	3	1	.11492	.36501	1.000	-.8817	1.1116
		2	.66331	.31886	.226	-.2043	1.5309
		4	.50202	.27631	.371	-.2498	1.2539

(continued)

Table 15 (continued)

Dependent Variable	(I) Program	(J) Program	(I-J) Mean Difference	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
	4	1	-.38710	.34803	.850	-1.3411	.5669
		2	.16129	.29926	.995	-.6551	.9777
		3	-.50202	.27631	.371	-1.2539	.2498
StudSocIllInvolve	1	2	-2.23441	1.05034	.206	-5.0963	.6275
		3	-1.10538	.94540	.818	-3.6790	1.4683
		4	.37849	.85643	.998	-1.9580	2.7150
	2	1	2.23441	1.05034	.206	-.6275	5.0963
		3	1.12903	1.04478	.866	-1.7170	3.9751
		4	2.61290	.96501	.054	-.0267	5.2525
	3	1	1.10538	.94540	.818	-1.4683	3.6790
		2	-1.12903	1.04478	.866	-3.9751	1.7170
		4	1.48387	.84960	.417	-.8315	3.7992
	4	1	-.37849	.85643	.998	-2.7150	1.9580
		2	-2.61290	.96501	.054	-5.2525	.0267
		3	-1.48387	.84960	.417	-3.7992	.8315
FamPeerSupport	1	2	1.06142	.64190	.481	-.6872	2.8100
		3	.68642	.66901	.891	-1.1349	2.5078
		4	.84872	.65247	.735	-.9290	2.6265
	2	1	-1.06142	.64190	.481	-2.8100	.6872
		3	-.37500	.64029	.993	-2.1155	1.3655
		4	-.21270	.62299	1.000	-1.9068	1.4814

(continued)

Table 15 (continued)

Dependent Variable	(I) Program	(J) Program	(I-J) Mean Difference	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
	3	1	-.68642	.66901	.891	-2.5078	1.1349
		2	.37500	.64029	.993	-1.3655	2.1155
		4	.16230	.65089	1.000	-1.6076	1.9322
	4	1	-.84872	.65247	.735	-2.6265	.9290
		2	.21270	.62299	1.000	-1.4814	1.9068
		3	-.16230	.65089	1.000	-1.9322	1.6076
PhysicalRes	1	2	-.55729	.52353	.874	-1.9833	.8688
		3	-1.60668*	.52140	.019	-3.0261	-.1872
		4	-.33148	.47541	.982	-1.6288	.9658
	2	1	.55729	.52353	.874	-.8688	1.9833
		3	-1.04940	.52570	.267	-2.4789	.3801
		4	.22581	.48013	.998	-1.0824	1.5340
	3	1	1.60668*	.52140	.019	.1872	3.0261
		2	1.04940	.52570	.267	-.3801	2.4789
		4	1.27520	.47780	.057	-.0255	2.5759
	4	1	.33148	.47541	.982	-.9658	1.6288
		2	-.22581	.48013	.998	-1.5340	1.0824
		3	-1.27520	.47780	.057	-2.5759	.0255
EnvDistract	1	2	.07917	.60508	1.000	-1.5671	1.7254
		3	.07917	.54918	1.000	-1.4165	1.5748
		4	-.58817	.55335	.874	-2.0955	.9192

(continued)

Table 15 (continued)

Dependent Variable	(I) Program	(J) Program	(I-J) Mean Difference	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
	2	1	-.07917	.60508	1.000	-1.7254	1.5671
		3	.00000	.56951	1.000	-1.5498	1.5498
		4	-.66734	.57354	.821	-2.2283	.8936
	3	1	-.07917	.54918	1.000	-1.5748	1.4165
		2	.00000	.56951	1.000	-1.5498	1.5498
		4	-.66734	.51422	.736	-2.0656	.7310
	4	1	.58817	.55335	.874	-.9192	2.0955
		2	.66734	.57354	.821	-.8936	2.2283
		3	.66734	.51422	.736	-.7310	2.0656
AcadStructure	1	2	-2.15417	1.08938	.277	-5.1180	.8097
		3	-2.63333*	.93933	.041	-5.1990	-.0677
		4	.59785	.97122	.991	-2.0502	3.2459
	2	1	2.15417	1.08938	.277	-.8097	5.1180
		3	-.47917	.96917	.997	-3.1235	2.1652
		4	2.75202*	1.00010	.046	.0279	5.4761
	3	1	2.63333*	.93933	.041	.0677	5.1990
		2	.47917	.96917	.997	-2.1652	3.1235
		4	3.23118*	.83414	.002	.9601	5.5023
	4	1	-.59785	.97122	.991	-3.2459	2.0502
		2	-2.75202*	1.00010	.046	-5.4761	-.0279
		3	-3.23118*	.83414	.002	-5.5023	-.9601

(continued)

Table 15 (continued)

Dependent Variable	(I) Program	(J) Program	(I-J) Mean Difference	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
AcadPeerSupport	1	2	1.02520	.68546	.597	-.8447	2.8951
		3	-.34980	.58445	.992	-1.9392	1.2396
		4	.30645	.55591	.995	-1.2069	1.8198
	2	1	-1.02520	.68546	.597	-2.8951	.8447
		3	-1.37500	.70403	.291	-3.2925	.5425
		4	-.71875	.68052	.878	-2.5764	1.1389
	3	1	.34980	.58445	.992	-1.2396	1.9392
		2	1.37500	.70403	.291	-.5425	3.2925
		4	.65625	.57865	.837	-.9183	2.2308
	4	1	-.30645	.55591	.995	-1.8198	1.2069
		2	.71875	.68052	.878	-1.1389	2.5764
		3	-.65625	.57865	.837	-2.2308	.9183

The School of Business is identified as 1, the School of Education indicated as 2, the School of Arts and Sciences 3, and the School of Social Work is reported as number 4. Results indicated there were significant differences between the School of Business and the School of Arts and Sciences on the persistence of graduate students, as it relates to *program advisement.* Results indicated there were significant differences between the School of Arts and Sciences and the School of Social Work on the persistence of graduate students, as it relates to *program advisement.*

Results indicated there were significant differences between the School of Education and the School of Social Work on the persistence of graduate students, as it relates to *student socialization and involvement*.

Results indicated there were significant differences between the School of Business and the School of Arts and Sciences on the persistence of graduate students, as it relates to *institutional physical resources*.

Results indicated there were significant differences between the School of Business and the School of Arts and Sciences on the persistence of graduate students, as it relates to *student response to academic structure*. Results indicated there were significant differences between the School of Education and the School of Social Work on the persistence of graduate students, as it relates to *student response to academic structure*. Results indicated there were significant differences between the School of Arts and Sciences and the School of Social Work on the persistence of graduate students, as it relates to *student response to academic structure.*

The data were subjected to further analysis to determine if there might be other factors affecting the persistence of graduate students. Persistence was examined in terms of age. An analysis of variance was conducted and from that it can be seen that with an f value of 3.36 and significance level of .012, there is a difference in persistence among age groups (see Table 16).

Table 16

ANOVA: Persistence by Age Range

Age	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.674	4	1.669	3.364	.012
Within Groups	59.518	120	.496		
Total	66.192	124			

Persistence was also examined in terms of race/ethnic background. An analysis of variance was conducted and from that it can be seen that with an f value of .729 and significance level of .257, there is no difference among ethnic backgrounds (see Table 17).

Table 17

ANOVA: Persistence Racial/Ethnic Background

Race	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.457	2	.729	1.373	.257
Within Groups	64.735	122	.531		
Total	66.192	124			

Persistence was also examined in terms of gender. A *t*-test was conducted and from that it can be seen that with a mean score of 11.81 (males) and 10.57 (females), and a .01 as the level of significance, which is below the accepted level of .05; male graduate students displayed a higher level of persistence (see Tables 18 and 19).

Table 18

T-Test: Persistence by Gender

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Persistence	1	49	11.816	3.08676	0.44097
	2	76	10.579	2.63951	0.30277

Table 19

T-Test for Equality of Means - Gender

		Levene's Test for Equality of Variances		T-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Persistence	Equal variances Assumed	1.12	0.293	2.393	123	0.018	1.23738	0.51711	0.21379	2.26097
	Equal variances not assumed			2.313	90.984	0.023	1.23738	0.5349	0.17486	2.2999

Persistence was also examined in terms of degree type. A *t*-test was conducted and from that it can be that the level of significance was indicated as .17, which is above the accepted level of .05; there are no significant differences with regard to degree type (see Tables 20 and 21).

Table 20

T-Test: Persistence by Degree Type

	Degree	N	Mean	Std. Deviation	Std. Error Mean
Persistence	1	53	10.66	2.63806	0.36237
	3	72	11.361	3.02248	0.3562

Table 21

T-Test for Equality of Means – Degree Type

		Levene's Test for Equality of Variances		T-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Persistence	Equal variances Assumed	0.44	0.507	-1.351	123	0.179	-0.70073	0.51876	-1.72759	0.32612
	Equal variances not assumed			-1.379	119.397	0.17	-0.70073	0.50812	-1.70683	0.30537

Qualitative Data Analysis

The qualitative data was analyzed by noting emergent themes and trends; as a result of data collection methods (focus group sessions, observations, and personal interviews). According to Lacey and Luff (2001), "Qualitative research is particularly

good at answering the 'why,' 'what' or 'how' questions" (p. 2). The analysis involved coding the data by significant themes which provided an understanding of the persistence of students in graduate programs. The steps in analyzing the data consisted of (a) pre-analysis, (b) data analysis, and (c) coding (Barnett, 2002). During pre-analysis the researcher gathered information by observing non-verbal behavior of the participants and taking detailed notes to serve as a foundation for the next step in the process. Data analysis involved the assessment and evaluation of all collected information. In addition, the researcher conducted thorough reflection based on the happenings during the data collection methods. After the data were analyzed, the researcher examined the data for various patterns and thematic concepts. In order to collect the data, the researcher worked with two focus groups, conducted three classroom observations, and directed three telephone interviews.

Participants in the focus group were randomly selected. Focus group session 1 consisted of 4 students and was conducted at a separate time from focus group session 2, which was comprised of five students. The following data is a culmination of responses from each focus group session. The researcher posed eight questions to each focus group, which included:

Q1. What do you think are the main reasons individuals do not complete graduate programs?

Q2. What is the most pertinent factor to prohibit a student from completing a graduate program?

Q3. On a scale of 1 to 10, what is the likelihood that you will complete your graduate program?

Q4. How would you describe your relationship with your advisor?

Q5. Has advisement been a contributing factor to your success in the program?

Q6. Has your advisor been available to meet with you at your request?

Q7. To what extent did academic peer support play a role in the success in your graduate program?

Q8. What are the main factors which have allowed you to persist in your graduate program?

The researcher collected demographic data on a sign-in sheet prior to beginning each focus group session. Participants consisted of 7 females, 2 males, 6 black students, 1 white student, 1 Hispanic student, and 1 student identified as Other (see Figures 2 and 3).

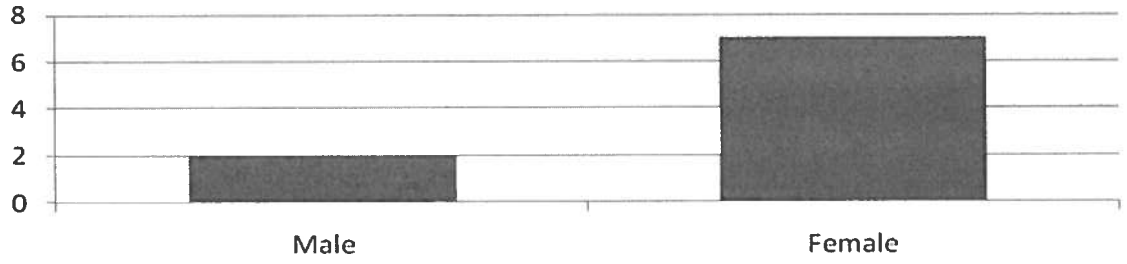

Figure 2. Focus Group Participants by Gender

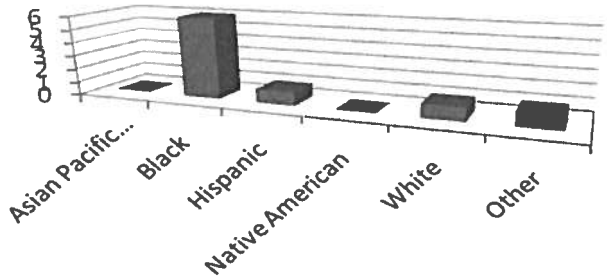

Figure 3. Focus Group Participants by Ethnic Background

In reference to program of study, 6 students enrolled in Business graduate programs, 5 Education students, 1 graduate student from Arts and Sciences, and 1 participant enrolled in a Social Work graduate program (see Figure 4).

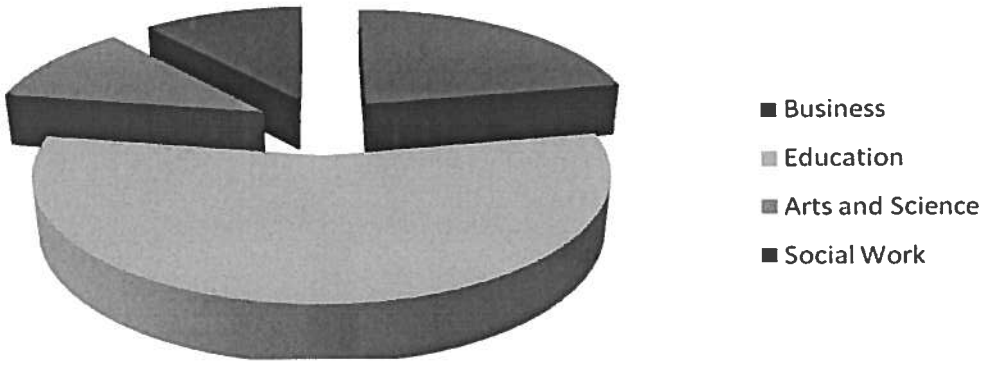

Figure 4. Focus Group Participants by Program of Study

Regarding degree type, participants included 6 doctoral students, and 3 enrolled in master's programs (see Figure 5).

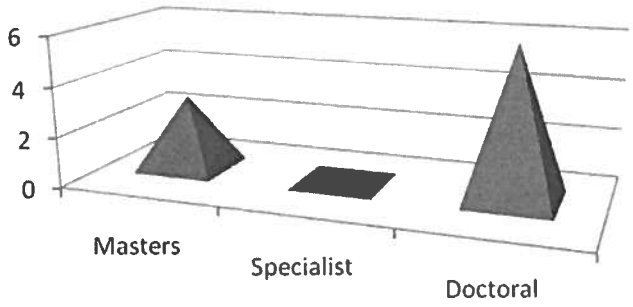

Figure 5. Focus Group Participants by Degree Type

The age range of participants included: 1 student between 21-25 years of age, 3 students between 26-31 years of age, 3 students between 32-37 years or age, 1 student between 38-43 years of age, and 1 student age 43 or older(see Figure 6).

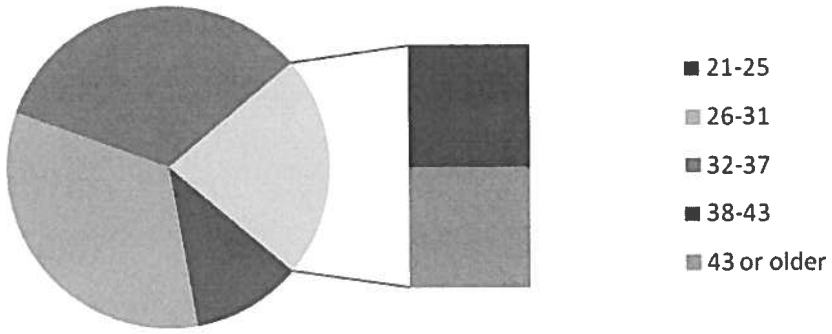

Figure 6. Focus Group Participants by Age Range

Participant responses to the focus group questions were reported and coded for analytical deduction. The researcher discovered the emergence of several themes after coding the participant responses. The formulated themes consisted of: family support (FS), unstructured departmental advisement(UDA), positive academic peer support (APS), poor academic structure (PAS), technology inadequacy (TI), financial aid support (FAS), dissertation advisement (DA), and positive advisement experience (PAE). As noted in Figure 7, the frequency data is displayed. The results indicated unstructured departmental advisement as the highest frequency by focus group participants. The next most frequent emerging code was noted as positive academic peer support. Family support and positive advisement experience also were indicated as highly indicated themes.

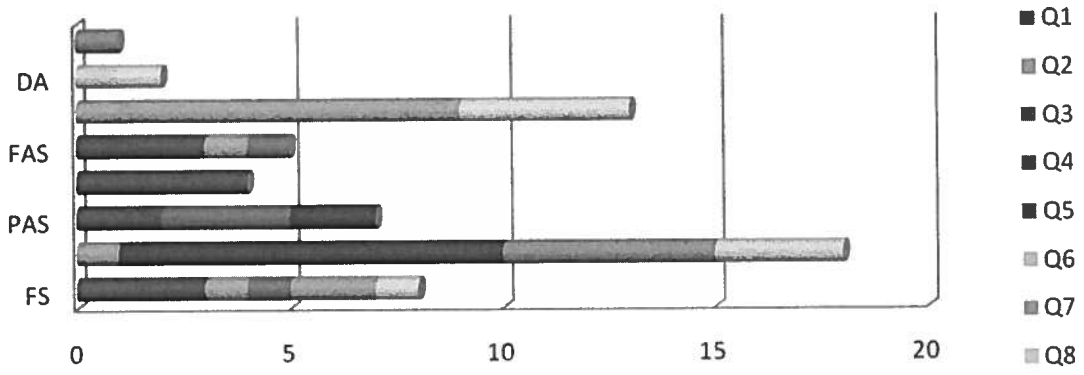

Figure 7. Focus Group Participants' Responses by Code Frequency

To further data collection, the researcher utilized the direct observation method. The researcher visited three graduate classroom settings for observation and gathered information regarding the climate of the classroom, interactions among students, and faculty/student interactions. The classes consisted of two master's level classes and one doctoral level class (see Figure 8).

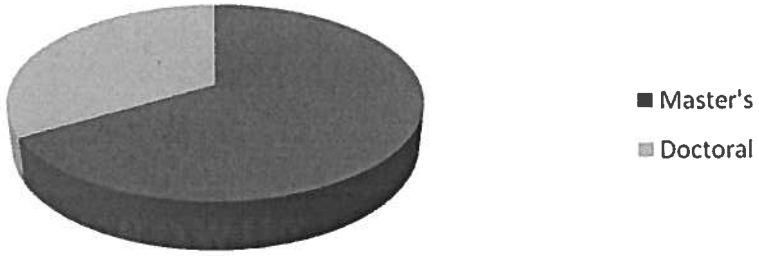

Figure 8. Direct Observation Sites by Degree Type

Two education classes and one social work course served as the environment for data collection (see Figure 9).

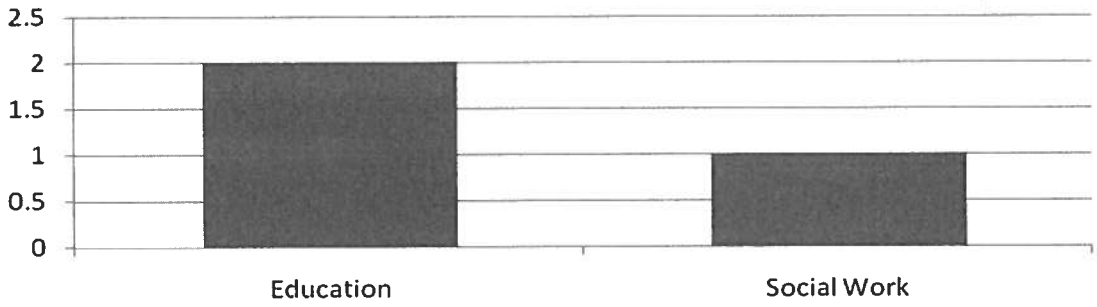

Figure 9. Direct Observations by Program of Study

The first observation involved 13 students, and 1 faculty member. The gender breakdown of the classroom involved 9 female students and 5 male students. The second observation was comprised of 7 students and 1 faculty member. The gender classifications for this observation consisted of 5 female students and 2 male students. The third observation site consisted of 9 students and 1 faculty member. The gender demographic for this observation involved 5 female students and 4 male students. Each class was observed for a period of one hour. The observation summary is provided to further explain the data obtained by the researcher (see Figure 10).

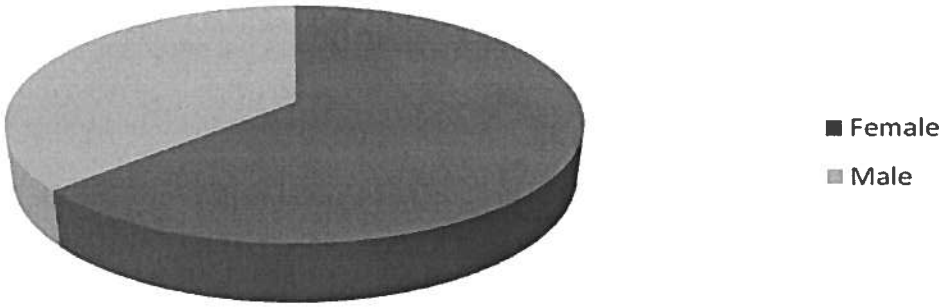

Figure 10. Direct Observations by Gender

Direct observations were reported and coded for analytical deduction. The researcher discovered the emergence of several themes after coding the site visits for direct observation. The framed themes consisted of: lack of student engagement (LSE), class participation (ACP), teaching style (TS), uncontrolled distractions (UD), technology use (TU), and researcher introduction (RI). The frequency data are presented in Figure 11. The results indicated class participation as the highest frequency by participants. The next most frequent emerging theme was noted as teaching style. Additionally, the lack of student engagement was indicated as a highly indicated theme. The results indicated direct observation 1 as the site where students were the least engaged. Observation site three showed the highest indication of active class participation. Interestingly, technology was only utilized at one site: direct observation site 1, where the students were least engaged.

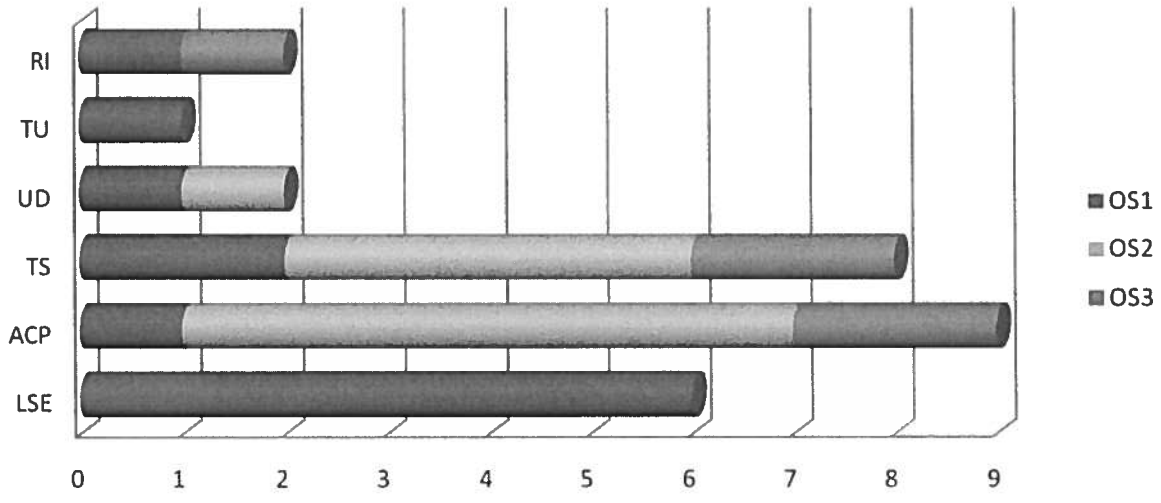

Figure 11. Direct Observations by Code Frequency

Additionally, the researcher conducted personal telephone interviews. A total of 3 graduate students were interviewed. Participants consisted of 2 females and 1 male (see Figure 12). In reference to program of study, 2 students enrolled in Education programs and 1 student enrolled in a Business graduate program participated in the personal interviews (see Figure 13).

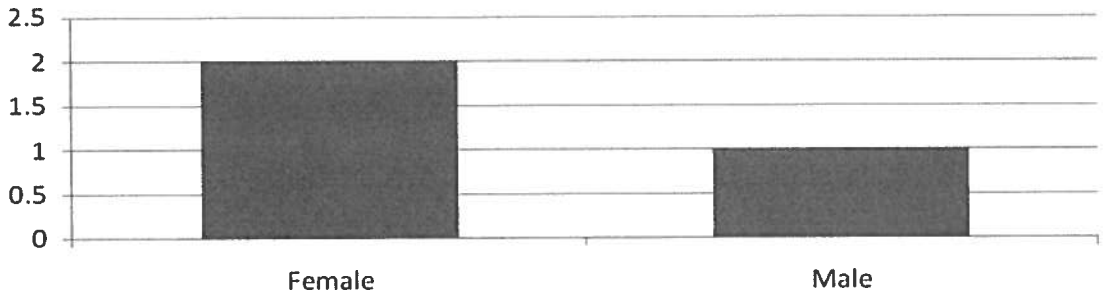

Figure 12. Personal Interviews by Gender

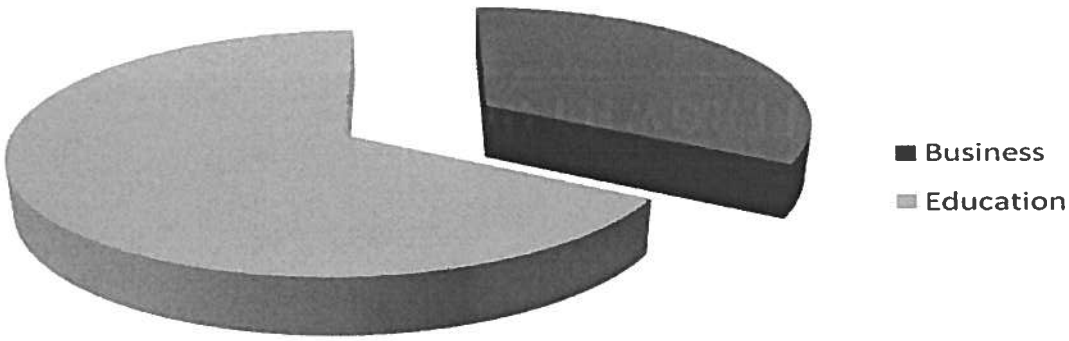

Figure 13. Personal Interviews by Program of Study

Regarding degree type, participants included 2 doctoral students, and 1 enrolled in master's programs (see Figure 14). The age range of participants included; 1 student between 26-31 years of age, 1 students between 32-37 years or age, 1 student between 38-43 years of age (see Figure 15).

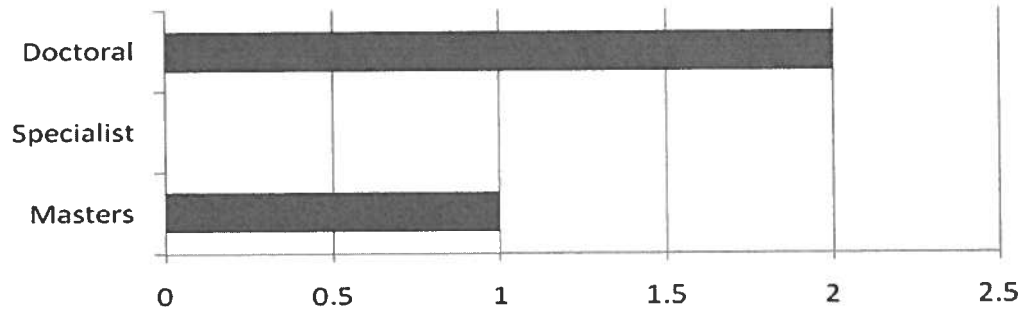

Figure 14. Personal Interviews by Degree Type

Figure 15. Personal Interviews by Age Range

The personal interviews provided an element of broader understanding of various perspectives on factors which make likely influence graduate student persistence as it related to the formulated research questions. Interviews lasted between 20 to 25 minutes and were guided by a protocol, which was structured but allowed for deviation

from the participants. The interview presented the following questions to guide the interview:

Q1. How do you believe program advisement may impact the persistence of students enrolled in graduate programs at an urban research institution?

Q2. How do you believe research advisement may impact the persistence of students enrolled in graduate programs at an urban research institution?

Q3. How do you believe financial aid status may impact the persistence of students enrolled in graduate programs at an urban research institution?

Q4. How do you believe student socialization and involvement may impact the persistence of students enrolled in graduate programs at an urban research institution?

Q5. How do you believe family and peer support may impact the persistence of students enrolled in graduate programs at an urban research institution?

Q6. How do you believe institutional physical resources may impact the persistence of students enrolled in graduate programs at an urban research institution?

Q7. How do you believe environmental distractions may impact the persistence of students enrolled in graduate programs at an urban research institution?

Q8. How do you believe academic structure may impact the persistence of students enrolled in graduate programs at an urban research institution?

The researcher recorded each interview with the consent of the participants. The interviews were then transcribed and analyzed, to determine the emergent themes.

Personal interviews were conducted and coded for analytical interpretation. The researcher discovered the emergence of several themes after coding the personal interviews for participants. The outlined themes consisted of: relationship development (RD), necessity of financial aid (NFA), negative student experience (NSE), external motivation (EM), self-motivation (SM), major persistence factor (MPF), and nominal persistence factor (NPF). As noted in Figure 16, the frequency of themes is presented. The results indicated that research advisement and family and peer support as the highest frequency by participants. The next most recurrent emerging theme was noted as dissatisfaction with advisement and academic structure. Additionally, all participants regarded a necessity of the receipt of financial aid as a key component of persistence. Nominal factors contributing to persistence were noted as; student socialization and involvement and student response to environmental distractions.

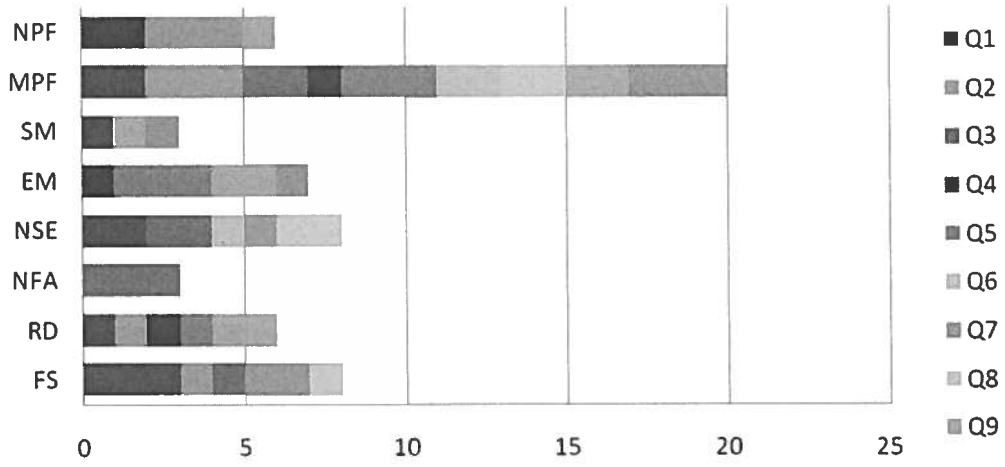

Figure 16. Personal Interview Responses by Code Frequency

CHAPTER VI

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

The purpose of this chapter is to identify and provide explanatory value to the foremost results from the research study. The conclusions are based on the findings and the implications as determined by the research. The recommendations are made for providing policies, procedures, and a framework for improving rates of graduate student persistence at urban research institutions. Additionally, this chapter provides recommendations for proposed future research in the area of persistence and attrition at the graduate level. The study was designed to examine the following factors: (a) demographic factors, (b) program advisement, (c) research advisement, (d) financial aid status, (e) student socialization and involvement, (f) family and peer support, (g) institutional physical resources, (h) student response to environmental distractions, (i) student response to academic structure, and (j) academic peer support which may have an effect on the persistence of graduate students at an urban research institution in the Southeastern region of the United States.

Summary

The purpose of this study was to analyze data as it is related to the theoretical framework which specifically concentrated on selected independent variables to include:

(a) demographic factors, (b) program advisement, (c) research advisement, (d) financial aid status, (e) student socialization and involvement, (f) family and peer support, (g) institutional physical resources, (h) student response to environmental distractions, (i) student response to academic structure, and (j) academic peer support. Graduate students participated as subjects in the research. Participants completed a survey instrument created for student responses on a five-point scale, known as the Likert-scale. The framework for the instrument provided participants with five responses which included: (a) strongly agree, (b) agree, (c) uncertain, (d) disagree, and (e) strongly disagree. Additionally, the researcher conducted three classroom direct observation site visits. During the visits, the researcher composed notes on the intellectual discourse, the interaction between faculty and student, and the engagement of classroom peers. To further the qualitative portion of the study, the researcher conducted three personal telephone interviews. The participants were randomly selected to contribute and thus, granted consent to provide personal experiences as it related to various independent variables and the possible impact on graduate student persistence. Furthermore, two focus groups were conducted to provide an opportunity for participants to respond to open-ended questions. The researcher collected detailed and descriptive notes and observed non-verbal behavior during each focus group session. The survey instrument was formulated in congruence with the selected independent variables. The personal telephone interview protocol was developed to gather student perspectives on several factors which may likely affect persistence. Moreover, the focus group interview

questions were generated in alignment with the research questions and selected independent variables.

Chapter one includes the introduction, statement of the problem, purpose of the study, the research questions, and the significance of the study. Following, chapter two contains a review of literature on the research topic in relation to the selected independent variables. The third chapter expounds on the theoretical framework of the study. In addition, chapter four establishes the research methodology employed for this study. Chapter five clarifies the analysis of data collected from the research. Lastly, chapter six consists of the summary, conclusion, findings and implications from the research, followed by the recommendations and conclusion.In order to further examine the perception of persistence of graduate students at an urban research institution, the following research questions were strategically devised:

RQ1: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and demographic factors: *(a) race, (b) age, (c) program of study, (d) undergraduate GPA, (e) gender, and (f) GRE score*?

RQ2: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *program advisement*?

RQ3: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *research advisement*?

RQ4: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution *and financial aid status*?

RQ5: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *student socialization and involvement*?

RQ6: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *family and peer support*?

RQ7: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution *and institutional physical resources*?

RQ8: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *student response to environmental distractions*?

RQ9: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *student response to academic structure*?

RQ10: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *academic peer support*?

RQ11: Is there a significant difference among the four selected programs on the *persistence of graduate students*?

RQ12: Is there a significant difference among the four selected programs on the *selected independent variables*?

The Statistical Package for Social Sciences (SPSS) was used to determine the Pearson's Correlation Coefficient, Frequency distribution, ANOVA, *t*-tests, and the Mean. The mean data provided the average response to items on the survey instrument for graduate students by degree type and gender. In addition, the mean data provided the average of the level of agreement shown between graduate students in their responses on the survey instrument. The Pearson's Correlation Coefficient was used to determine the level of relationship between persistence of graduate students and the selected independent variables. The accepted level of probability to test the significance of the relationship was measured at .05 or below. In addition, the researcher utilized a *t*-Test and ANOVA to determine significance at the .05 or below. Two focus group sessions were conducted to add breadth to the study. The researcher also conducted direct site observations. Further, the researcher conducted three personal interviews. The qualitative aspect of the study allowed the researcher to collect numerous opinions of graduate students, in relation to the research questions. The graduate students infused personal experiences into the focus group discussions and personal interviews; which provided a subjective dynamic to the research. Three data collection instruments were used to triangulate and validate the study.

Findings

A summary of the findings, inclusive of quantitative and qualitative data, contributes to the nominal amount of previous research regarding persistence of graduate students. This research determined factors which have shown a significant impact on persistence.

Program Advisement

Both the quantitative and qualitative data indicated the significance of program advisement and its impact on graduate student persistence. The quantitative data showed the importance of program advisement as it relates to persistence by indicating a strong relationship of significance at the .00 level. Students answered questions on the survey instrument related to; advisement expectations, advisement as a major component of the department, receipt of advisement tools, and advisor communication experiences.

During both the personal interviews and focus groups, program advisement was noted as a major component of persistence. Students revealed the following regarding program advisement: Program advisement is key, program advisement is a major part of persistence, if a great relationship is formed with an advisor it can shape the process, and . . . department does not provide opportunities for students to have access to professors and advisors, it can lead to isolation and the student may leave the program.

Financial Aid Status

Overwhelmingly, the qualitative data indicated the significance of financial aid status and its impact on graduate student persistence. During both the personal interviews and focus groups, financial aid status was noted as a major component of

persistence. Students revealed the following regarding financial aid status: *If this option was not available to me, I would not be able to complete my program;* program advisement is a major part of persistence: Financial aid has a great impact on the persistence of graduate students. If you aren't able to qualify for it, you may not be able to complete your degree; I know it would be nearly impossible for me to complete my education without receiving assistance from other sources, and People not feeling that they can afford it or whatever the situation may be and then particularly at this institution, getting the run around with financial aid. It can cause someone to not be persistent because they would give up before they even get started. However, the quantitative data did not support the qualitative findings.

Student Socialization and Involvement

In support of the quantitative data, the qualitative data indicated the significance of student socialization and involvement and its impact on graduate student persistence. The quantitative data showed the importance of student socialization and involvement as it relates to persistence by indicating a strong relationship of significance at the .00 level. Students answered questions on the survey related to; perceptions of student involvement, participation in student organizations, familiarity outside of the academic setting, and opportunities for socialization. During both the personal interviews and focus groups, student socialization and involvement was noted as a major component of persistence. Students revealed the following regarding student socialization and involvement: Socialization is a part of persistence because you build relationships outside of the

classroom and I became active in my student organization to meet others and learn about the happenings in the education world.

Family and Peer Support

In tandem with the quantitative data, the qualitative findings indicated the significance of family and peers support and its influence on graduate student persistence. The quantitative data showed the importance of family and peer support as it relates to persistence by indicating a strong relationship of significance at the .002 level. Students answered questions on the survey related to; emotional support from family, emotional support from peers, family distractions, lack of family support, and peer study groups.

During both the personal interviews and focus groups, family and peer support was noted as a main component of persistence. Students revealed the following regarding family and peer support: I believe family support has a great impact on persistence. I say this because students who have family and peer support have a cheerleading section. On the days when you feel like completely quitting, those individuals will allow you to vent; My friends have been my major support system in working toward my goal of completing this program; Family is everything, especially when you have a goal. They provide the encouragement and support you need to work toward completion; If I didn't have my family and friends, I wouldn't be able to get through this program; and Family and friends can encourage you. During the personal interviews, 100% of the participants interviewed regarded family and peer support as an important factor in graduate student persistence.

Student Response to Academic Structure

Both the quantitative and qualitative data findings indicated the significance of student response to academic structure and its influence on graduate student persistence. The quantitative data showed the importance of student response to academic structure as it relates to persistence by indicating a strong relationship of significance at the .000 level. Students answered questions on the survey related to; intellectual climate, quality of instruction, programmatic outline, family support/structure, and faculty accessibility.

During both the personal interviews and focus groups, student response to academic structure was noted as a foremost component of persistence. Students revealed the following regarding student response to academic structure: This is one area where I believe my department has created a sub-par experience for graduate students. The impact on persistence is that students become frustrated with not understanding sequences of taking classes. How can you persist when you don't realize certain classes are offered during specific semesters? This is unfair. The department should do a better job of developing a succinct program outline complete with how courses are offered; The lack of academic structure sadly causes students to take classes they don't need or out of the order necessary. The way it impacts persistence is by causing students to become confused and that is unnecessary; the structure and outline of the program are considerably important. If you have no direction, you have no idea what the next steps are; After realizing how this institution set up the courses, I realized that I had to be smart about how I took certain courses; and Students do not complete programs because of the schedules and lack of course availability.

Academic Peer Support

In concert, the quantitative and qualitative data findings indicated the significance of academic peer support and its influence on graduate student persistence. The quantitative data showed the importance of academic peer support as it relates to persistence by indicating a strong relationship of significance at the .000 level. Students answered questions on the survey related to; positive influence of classmates, classmate support, and development of positive relationships.

During both the personal interviews and focus groups, academic peer support was noted as a prominent factor of persistence. Students revealed the following regarding academic peer support: Academic peer support has been a major factor in my persistence. These people are more than classmates, they are my peers. Developing a network is important. I met another student during the first semester of my program and we've been extremely close. We keep each other focused. Students need to have classmates who push them and encourage them. The great thing about this group is they are side-by-side, going through the process with you so they totally understand. My hope is that I am able to continue these friendships after we graduate and that we continue to network in our professional lives as well; The impact on persistence is huge because the support received from your classmates is unexplainable. The reassurance and reinforcement says that we will all get to the finish line. The 'you can do its' are priceless because you walk away from the conversation really believe that you can do it and you will. I am glad to be a part of a traditional program where I can see and get to know my classmates; I probably wouldn't have made it if I didn't have someone to call

and say okay, don't worry we'll help you get thru it; My classmates are awesome. We have struggled together and fought to keep going. I am very thankful to have met some of the people I have in my program. We have an unspoken brother/sisterhood that binds us; I realized that my perspective changed on my graduate experience, when I started developing relationships with my peers. Now, I've made at least 5 friends. When we aren't doing school related assignments, we may share a meal. This is important because you need balance; and these relationships are priceless. I have talked someone out of quitting the program. I know it can be frustrating, but we start these programs to finish and endure what may come our way. We have to be strong for one another because if it was so easy to do, everyone would be a doctor. During the focus group sessions and personal interviews, 91% of students identified academic peer support as a significant part of their graduate experience as it related to persistence.

Graduate Student Persistence by Gender

Findings from the data set concluded that there were differences in levels of persistence by gender. Regarding the gender classification, the findings indicated that male graduate students persisted at a higher level than females graduate students (see Table 19).

Graduate Student Persistence by Age

The analysis of the data found a significant relationship between age and graduate student persistence. Older students demonstrated a higher likelihood to persist than younger graduate students (see Table 11).

The purpose of this study was to examine the selected independent variables which may have impacted the persistence of graduate students enrolled in programs at an urban research institution in the Southeastern region of the United States. Participants in this mixed methods study provided views and perspectives on the issue of graduate student persistence. The results indicated several significant relationships based on the formulated research questions. Overall, data indicated that program advisement, financial aid status, student socialization and involvement, family and peer support, student response to academic structure, and academic peer support had a substantial impact on the persistence of graduate students.

The qualitative data supported the statistically significant findings (see Chapter 5). In the personal interviews and focus group sessions, participants revealed opinions of factors which may impact the persistence of students. The focus group participants overwhelmingly indicated program advisement (89%), academic peer support (100%), and family and peer support (56%), as key factors influencing persistence (see Chapter 5). In addition, the personal interviews provided similar viewpoints from students enrolled in graduate programs. The personal interview participants indicated the following as influential factors which affect the persistence of students; program advisement, research advisement, family and peer support, student response to academic structure, financial aid status, and institutional physical resources.

Conclusions

RQ1: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *(a) race, (b) age,*

(c) program of study, (d) undergraduate GPA, (e) gender, and (f) GRE score?

Results indicated there was a significant relationship between the persistence of students in graduate programs at an urban research institution and age. Additionally, results indicated there was a significant relationship between persistence of students and gender.

RQ2: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *program advisement*?

Results indicated there was a significant relationship between the persistence of students in graduate programs at an urban research institution and program advisement.

RQ3: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *research advisement?*

Results indicated there was no significant relationship between the persistence of students in graduate programs at an urban research institution and research advisement.

RQ4: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *financial aid status*?

Results indicated there was no significant relationship between the persistence of students in graduate programs at an urban research institution and financial aid status

with regard to the quantitative data. However, the qualitative data showed high levels of importance related to the persistence of students and financial aid status.

RQ5: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *student socialization and involvement*?

Results indicated there was a significant relationship between the persistence of students in graduate programs at an urban research institution and student socialization and involvement.

RQ6: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *family and peer support*?

Results indicated there was a significant relationship between the persistence of students in graduate programs at an urban research institution and family and peer support.

RQ7: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *institutional physical resources*?

Results indicated there was no significant relationship between the persistence of students in graduate programs at an urban research institution and institutional physical resources.

RQ8: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *student response to environmental distractions*?

Results indicated there was no significant relationship between the persistence of students in graduate programs at an urban research institution and student response to environmental distractions.

RQ9: Is there a significant relationship between the persistence of students in graduate programs at an urban research institution and *student response to academic structure*?

Results indicated there was a significant relationship between the persistence of students in graduate programs at an urban research institution and student response to academic structure.

RQ10: Is there a significant relationship between the persistence of students in Graduate programs at an urban research institution and *academic peer support*?

Results indicated there was a significant relationship between the persistence of students in graduate programs at an urban research institution and academic peer support.

RQ11: Is there a significant difference among the four selected programs on the *persistence of graduate students*?

Results indicated there were no significant differences among the four selected programs on the persistence of graduate students.

RQ12: Is there a significant difference among the four selected programs on the *selected independent variables*?

Results indicated there were significant differences between the School of Business and the School of Arts and Sciences on the persistence of graduate students, as it relates to *program advisement.*

Results indicated there were significant differences between the School of Arts and Sciences and the School of Social Work on the persistence of graduate students, as it relates to *program advisement.*

Results indicated there were significant differences between the School of Education and the School of Social Work on the persistence of graduate students, as it relates to *student involvement and socialization.*

Results indicated there were significant differences between the School of Business and the School of Arts and Sciences on the persistence of graduate students, as it relates to *institutional physical resources.*

Results indicated there were significant differences between the School of Business and the School of Arts and Sciences on the persistence of graduate students, as it relates to *student response to academic structure.*

Results indicated there were significant differences between the School of Education and the School of Social Work on the persistence of graduate students, as it relates to *student response to academic structure.*

Results indicated there were significant differences between the School of Arts and Sciences and the School of Social Work on the persistence of graduate students, as it relates to *student response to academic structure*.

Discussion

Many institutions have recently become intentional regarding refocusing programmatic and academic support for the graduate student population. As important contributors to the educational breadth of academia, graduate students have been neglected in administrational planning and implementation at the university level. Specifically, the development of services and resources have been mediocre and generally focused more-so on undergraduate students. Seemingly, a lack of shared value for the allocation of graduate student needs has contributed to attrition, which negatively affects both the university and the student.

For this research study, factors which may likely impact the persistence of graduate students were assessed by the completion of a Likert-scale instrument, two focus group sessions, direct site observations, and personal interviews. The items on each data collection instrument were aligned in accordance to the selected independent variables which included: (a) demographic factors, (b) program advisement, (c) research advisement, (d) financial aid status, (e) student socialization and involvement, (f) family and peer support, (g) institutional physical resources, (h) student response to environmental distractions, (i) student response to academic structure, and (j) academic peer support.

Implications

This triangulated data for this study indicated several key factors which affect the persistence of graduate students. The administration of the environment for which the study was conducted recently unveiled concentrated and dedicated services for graduate students including the addition of the Graduate Writing Center. For doctoral students, this is a critical resource and if utilized correctly, can serve a vast resource in the process of writing the dissertation (Switzer & Perdue, 2011). Thus, the institution has begun to recognize the importance of providing support services for students beyond the classroom. In alignment with the classroom experience, these resources are imperative to keep students engaged and connected to the university and more specifically, to their specific graduate program. Higher education institutions must recognize the importance of the graduate student population and exercise the display of value by providing resources. Presidents, provosts, deans, vice presidents, directors, and faculty members will benefit from this study, as it provides an investigation on the paramount factors which cause students to successfully persist toward completion of a graduate program. Each sector of the educational hierarchy can profit from the results presented in this research. The final results of the research concluded that program advisement, family and peer support, financial aid status, student socialization and involvement, student response to academic structure, and academic peer support affect the persistence of graduate students toward completion of a degree.

Participants in this study reported that program advisement, financial aid status, student socialization and involvement, family and peer support, student response to

academic structure, and academic peer support and major factors in the persistence of degree completion for graduate students. However, the data also reported that institutional physical resources, student response to environmental distractions, and research advisement were not factors which impact the persistence of degree completion for graduate students. Additionally, the data indicated that older students persist at a higher rate than younger students. Thus, these students have a higher level of persisting toward completion of a graduate program. The information regarding gender classification deemed persistence at a higher level for male students than female students. The Council of Graduate Students (2009) reports that "it appears likely that the graduate degree rate for women in the U. S. population will soon surpass that of men" (p. 7). Hence, the data indicated on the survey should provide a foundational framework of a needs assessment for institutions of higher learning based on the experiences of students currently enrolled in graduate programs. The assessment piece is a key element of the improvement of persistence. This study sought out to determine the primary institutional and personal needs for students which impact persistence.

Students provided candid frustrations regarding areas of concern for the improvement of program advisement. An overwhelming number of participants in the qualitative data collection methods reported being disenchanted with advisement. Several students mentioned that this could serve as a measure for students leaving the university and choosing other reputable programs. The data is also supported statistically. There is an important impact of the advisement students received and their perspectives on persistence. Advisor-advisee relationships shape student experiences in

graduate programs. Thus, the data suggests a need to improve this factor in relation to student persistence.

In addition, financial aid status was deemed a necessity during the graduate degree plight. Students must have access to funding in order to persist. The institution examined in the study is a nonprofit, private institution whereby many students receive some form of assistance. In the qualitative data collection, participants reported financial aid status as a high contributor to the success of graduate school persistence. The receipt of financial aid allows students to make tuition payments, purchase required course books and materials, acquire housing options, and provide other personal expenses necessary to maintain the requirements of graduate school. Although students may be eligible to receive scholarships, grants, and/or loans to satisfy all accounting items, the ease of the administrative process (interacting with staff members) was noted as a hardship for students.

Participants in this study focused on the essential aspects of student socialization and involvement. Although different from undergraduate involvement, graduate students still indicated this factor as a strong contributor toward persistence. Graduate students in this study regarded socialization and involvement as networking, professional development, attending conferences, and collaboration. The importance of socialization, as it relates to the context of this study, suggests that the connection developed in interacting with others is deemed as a positive measure of the graduate student experience overall. During the development and interaction with others in their graduate programs; an opportunity is given to share best practices and introduce new ideas and

concepts in the professional arena (Bain, Fedynich, & Knight, 2010; Ostrove, Stewart, & Curtin, 2011). Socialization and involvement in the graduate school setting also provides sharing of connections which may lead to future career opportunities. This key aspect of a graduate program can create a positive alliance for students.

Family and peer support seemed to be consistent throughout each data collection method as crucial construct of graduate student persistence. Beyond motivation and perseverance, family and friends also become a part of the graduate student experience. Although not actively; family and peers served as the encouragement source for students navigating toward completion. Participants consistently noted the necessity of the reinforcement received from their friends and family members. An emerging theme throughout the conversations with students; the consensus seemed to reveal that many were not sure of the possibility of attainment of this feat without the support of their loved ones.

An additional paradigm in the graduate student experience, based on the findings of the research, was the student response to academic structure. The academic structure module focused on the outline of the program, accessibility to faculty members, classroom environment and intellectual climate. Based on the data, students overwhelmingly agreed on the importance of a solid academic structure. However, the data revealed substantial emerging themes of the dissatisfaction with the academic structure. Students felt great discontent with the lack of direction and organization. Many students noted the lack of through communication when changes occur within their department and the unfortunate possibility of taking unnecessary courses. It is obvious

that clear outlines for completion are the standard for students to complete programs. Whenever students are missing the element of direction, they become frustrated with processes and confused. This can lead to attrition, as students may begin to seek other programs and/or institutions to complete their studies.

The resilient bond and incessant reassurance from peers who can inevitably identify with the challenges, triumphs, and struggles in the pursuit of a graduate degree is essential. Furthermore, participants in the research noted academic peer support as a vital dynamic in the graduate student persistence concept. Relationships and friendships developed as a result of forming bonds with academic peers. Students regarded peer support as a requisite factor related to graduate student persistence. Networks, contacts, connections, introductions, and many other associations are established with those learning the concepts inside and outside of the classroom. The support given and received by participants in graduate programs materialized as a fundamental factor in the persistence of graduate students at an urban research institution.

Recommendations

Recommendations for Practice

1. Under the current practices, faculty members serve as advisors to graduate students. Faculty should make an effort to adhere to office hours, as posted. This will improve accessibility. Faculty members and students should respect and accommodate each other's schedules, for meetings purposes.
2. The current advisement practices are causing high student frustration. Department Chairs should ensure each student is assigned an advisor upon

entry of the program. This would establish a rapport and potentially develop into a research advisement relationship later in the graduate program.

3. Department Chairs should investigate a technologically advanced factor in advising practices. Advisement should involve more electronic usage to accommodate convenience for both faculty and students. The addition of the utilization of technology will improve accessibility.
4. The President, Provost, and Dean of Graduate Studies should investigate expanding the graduate academic advisement component of the institution. Newly implemented advising centers should become a mainstay for each program (Business, Education, Arts and Sciences, Social Work). The centers should include a Director and up to four advisors, depending on the quantity of graduate students for each program. The advisement center would focus on assistance with program advisement only. Students would have a dedicated advisor throughout the duration of their graduate program. Faculty members would be relieved of program advisement to focus strictly on research advisement.
5. The Office of Graduate Studies should facilitate graduate student orientation and it and should be mandatory for students to attend. During this time students would have the opportunity to meet faculty members, introduce themselves to the Academic Dean of the college, meet new students in their programs, and connect with advisors. Orientation should be conducted in the

Fall and scaled down versions should also be conducted prior to the beginning of Spring and Summer semesters.

6. Each Department Chair should ensure that each student receives a detailed program of study which outlines the courses required and the research requirements for successful completion of the program. This will serve as the guide for sequence of courses. Additionally, the outline should include detailed steps on how to successfully complete the thesis/dissertation portion of the graduate program.
7. To enhance the communication of students within their graduate programs, students should receive an electronic quarterly newsletter from the Dean of Graduate Studies. The purpose of this communication would be to highlight student accomplishments, highlight faculty accomplishments, and inform students of changes to policies and/or procedures.
8. The Department Chair and Academic Dean for each graduate program should aggressively pursue funding to provide graduate students opportunities to attend conferences and networking events.
9. The Department Chair and Academic Dean should facilitate opportunities for students to develop connections with academic peers early in the program, to solidify a group of support.
10. The Dean of Graduate Studies should consult with each Academic Dean to begin a peer mentoring program should be established within each graduate

college. This will provide more seasoned graduate students an opportunity to assist newer students in navigating their programs.

11. The Dean of Graduate Studies should work with the staff in the Office of Graduate Studies, to develop a volunteer organization for family members of graduate students with the purpose of providing support.
12. Department Chairs, Academic Deans, and the Dean of Graduate Studies should facilitate opportunities for off-campus events catered to the graduate student population which would allow students to feel valued and a part of the campus community and culture.
13. Academic Deans should seek to investigate the development of learning communities (cohorts) at the graduate level, to assist with successful persistence. This will support cohesion of academic peer support. This model has typically been successful at the undergraduate level, but recently success has been noted at the graduate level as well (Kraska, 2008).

Recommendations for Policy

1. Department Chairs and Faculty should ensure that students meet with their advisors at least twice during the semester. This will allow for building continuity and establishing accountability for the student.
2. The Dean of Graduate Studies, in collaboration with the Division of Sponsored Programs, should facilitate a mandatory IRB (Institution Review Board) Workshop. This may limit confusion on the academic structure as it relates to the research portion of the graduate program.

Recommendations for Future Research

1. To further strengthen the findings of this study, a researcher can include the sample of students who were not enrolled for at least two consecutive semesters within each graduate program. This would provide another construct to the attrition piece of the study. A comparison of students who are not currently enrolled with those students currently enrolled in would add to the depth of the research.
2. While this study included only graduate students in each of the four programs, the addition of faculty perspectives would allow further research to review perspectives of both students and faculty.
3. In addition, the perspective of higher education administrators in a future study is necessary because it could encourage leadership to conduct self-analysis of their attributions toward graduate student persistence and attrition.
4. Further, the perceptions of students may show variance depending on which level they are currently in, in the program. In order to assess this concept, a researcher may compare the views of students in coursework versus students who are in the research stage.
5. To further strengthen the study, a researcher may compare more than one institution. This will provide a larger and varied sample. This study was conducted at an urban, private research institution therefore; conducting the same study at a public institution may add depth to the research.

6. A study that compares the outcomes of geographically diverse institutions will assist with discrediting any belief that these finding may be valid for only the Southeastern part of the United States.
7. It would be necessary to add more racial/ethnic diversity to further research, to gain the ability to make better comparisons on demographic measures related to the issue of graduate student persistence.

The purpose of this mixed-methods study provided data that supported that the independent variables; program advisement, financial aid status, student socialization and involvement, family and peer support, student response to academic structure, and academic peer support showed significant impact on the persistence of graduate students at an urban research institution in the Southeastern region of the United States. Due to the nature of importance to the educational framework of the university's mission, the exploration of further research on the issue of graduate student attrition and persistence may improve the number of students graduating from programs, the number of students interested in pursuing the institution as a viable option for graduate study, and may also enlighten administrators on the significance of providing a holistically positive experience for graduate students who are often left in the shadows to navigate programs on their own.

APPENDIX A

Correlation Tables

Table A1

Persistence: Item-to-Scale Correlations

		Q31	Q32	Q33	Q34	Q35	Persistence
Q31	Pearson Correlation	1	.701**	.713**	-.574**	.728**	.833**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	126	125	126	126	126	125
Q32	Pearson Correlation	.701**	1	.703**	-.573**	.688**	.829**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	125	125	125	125	125	125
Q33	Pearson Correlation	.713**	.703**	1	-.503**	.701**	.861**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	126	125	126	126	126	125
Q34	Pearson Correlation	-.574**	-.573**	-.503**	1	-.659**	-.394**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	126	125	126	126	126	125
Q35	Pearson Correlation	.728**	.688**	.701**	-.659**	1	.807**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	126	125	126	126	126	125
Persistence							
	Pearson Correlation	.833**	.829**	.861**	-.394**	.807**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	125	125	125	125	125	125

Appendix A (continued)

Table A2

Program Advisement: Item to Scale Correlations

		Q1	Q2	Q3	Q4	ProgramAdvise
Q1	Pearson Correlation	1	.765**	.746**	.656**	.893**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	126	126	126	126	126
Q2	Pearson Correlation	.765**	1	.688**	.570**	.855**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	126	126	126	126	126
Q3	Pearson Correlation	.746**	.688**	1	.800**	.920**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	126	126	126	126	126
Q4	Pearson Correlation	.656**	.570**	.800**	1	.860**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	126	126	126	126	126
ProgramAdvise						
	Pearson Correlation	.893**	.855**	.920**	.860**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	126	126	126	126	126

Appendix A (continued)

Table A3

Research Advisement: Item-to-scale Correlations

		Q5	Q6	ResearchAdvise
Q5	Pearson Correlation	1	.999**	1.000**
	Sig. (2-tailed)		.000	.000
	N	125	125	125
Q6	Pearson Correlation	.999**	1	1.000**
	Sig. (2-tailed)	.000		.000
	N	125	126	125
ResearchAdvise	Pearson Correlation	1.000**	1.000**	1
	Sig. (2-tailed)	.000	.000	
	N	125	125	125

Table A 4

Student Socialization and Involvement: Item-to-Scale Correlations

		Q11	Q12	Q13	Q14	StudSociIlInvolve
Q11	Pearson Correlation	1	.688**	.371**	.470**	.810**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	126	125	125	125	123
Q12	Pearson Correlation	.688**	1	.493**	.494**	.867**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	125	125	124	124	123
Q13	Pearson Correlation	.371**	.493**	1	.414**	.698**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	125	124	125	124	123
Q14	Pearson Correlation	.470**	.494**	.414**	1	.760**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	125	124	124	125	123

(continued)

Appendix A (continued)

Table A4 (continued)

		Q11	Q12	Q13	Q14	StudSocillInvolve
StudSocillInvolve						
	Pearson Correlation	.810**	.867**	.698**	.760**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	123	123	123	123	123

Table A5

Financial Aid Status: Item-to-Scale Correlations

		Q7	Q8	FinancialAid
Q7	Pearson Correlation	1	.450**	.831**
	Sig. (2-tailed)		.000	.000
	N	126	125	125
Q8	Pearson Correlation	.450**	1	.871**
	Sig. (2-tailed)	.000		.000
	N	125	125	125
FinancialAid	Pearson Correlation	.831**	.871**	1
	Sig. (2-tailed)	.000	.000	
	N	125	125	125

Appendix A (continued)

Table A6

Family and Peer Support: Item-to-Scale Correlations

		Q15	Q16	Q17	Q18	Q19	FamPeerSupport
Q15	Pearson Correlation	1	.230**	-.435**	-.493**	.268**	.130
	Sig. (2-tailed)		010	.000	.000	.002	.152
	N	126	126	125	125	126	124
Q16	Pearson Correlation	.230**	1	-.048	-.060	.410**	.666**
	Sig. (2-tailed)	.010		.597	.504	.000	.000
	N	126	126	125	125	126	124
Q17	Pearson Correlation	-.435**	-.048	1	.356**	-.075	.484**
	Sig. (2-tailed)	.000	.597		.000	.403	.000
	N	125	125	125	124	125	124
Q18	Pearson Correlation	-.493**	-.060	.356**	1	-.163	.351**
	Sig. (2-tailed)	.000	.504	.000		.069	.000
	N	125	125	124	125	125	124
Q19	Pearson Correlation	.268**	.410**	-.075	-.163	1	.526**
	Sig. (2-tailed)	.002	.000	.403	.069		.000
	N	126	126	125	125	126	124
FamPeerSupport							
	Pearson Correlation	.130	.666**	.484**	.351**	.526**	1
	Sig. (2-tailed)	.152	.000	.000	.000	.000	
	N	124	124	124	124	124	124

Appendix A (continued)

Table A7

Institutional Physical Resources: Item-to-Scale Correlations

		Q20	Q21	Q22	PhysicalRes
Q20	Pearson Correlation	1	.340**	-.283**	.601**
	Sig. (2-tailed)		.000	.002	.000
	N	125	125	123	123
Q21	Pearson Correlation	.340**	1	-.206*	.695**
	Sig. (2-tailed)	.000		.022	.000
	N	125	126	124	123
Q22	Pearson Correlation	-.283**	-.206*	1	.348**
	Sig. (2-tailed)	.002	.022		.000
	N	123	124	124	123
PhysicalRes	Pearson Correlation	.601**	.695**	.348**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	123	123	123	123

Table A8

Student Response to Environmental Distractions: Item-to-Scale Correlations

		Q23	Q24	Q25	EnvDistract
Q23	Pearson Correlation	1	-.222*	-.183*	.303**
	Sig. (2-tailed)		.013	.041	.001
	N	126	126	125	125
Q24	Pearson Correlation	-.222*	1	.758**	.806**
	Sig. (2-tailed)	.013		.000	.000
	N	126	126	125	125
Q25	Pearson Correlation	-.183*	.758**	1	.819**
	Sig. (2-tailed)	.041	.000		.000
	N	125	125	125	125
EnvDistract	Pearson Correlation	.303**.	.806**	.819**	1
	Sig. (2-tailed)	001	.000	.000	
	N	125	125	125	125

Appendix A (continued)

Table A9

Student Response to Academic Structure: Item-to-Scale Correlations

		Q26	Q27	Q28	Q29	Q30	AcadStructure
Q26	Pearson Correlation	1	.658**	.226*	.267**	.155	.608**
	Sig. (2-tailed)		.000	.011	.003	.083	.000
	N	126	126	126	123	126	123
Q27	Pearson Correlation	.658**	1	.317**	.433**	.321**	.733**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	126	126	126	123	126	123
Q28	Pearson Correlation	.226*	.317**	1	.487**	.422**	.702**
	Sig. (2-tailed)	.011	.000		.000	.000	.000
	N	126	126	126	123	126	123
Q29	Pearson Correlation	.267**	.433**	.487**	1	.703**	.814**
	Sig. (2-tailed)	.003	.000	.000		.000	.000
	N	123	123	123	123	123	123
Q30	Pearson Correlation	.155	.321**	.422**	.703**	1	.734**
	Sig. (2-tailed)	.083	.000	.000	.000		.000
	N	126	126	126	123	126	123
AcadStructure							
	Pearson Correlation	.608**	.733**	.702**	.814**	.734**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	123	123	123	123	123	123

Appendix A (continued)

Table A10

Academic Peer Support: Item-to-Scale Correlations

		Q36	Q37	Q38	AcadPeerSupport
Q36	Pearson Correlation	1	.705**	.705**	.889**
	Sig. (2-tailed)		.000	.000	.000
	N	126	125	125	125
Q37	Pearson Correlation	.705**	1	.793**	.919**
	Sig. (2-tailed)	.000		.000	.000
	N	125	125	125	125
Q38	Pearson Correlation	.705**	.793**	1	.913**
	Sig. (2-tailed)	.000	.000		.000
	N	125	125	125	125
AcadPeerSupport	Pearson Correlation	.889**	.919**	.913**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	125	125	125	125

APPENDIX B

Informed Consent

Clark Atlanta University
Department of Educational Leadership

TITLE: PERSISTENCE OF GRADUATE STUDENTS AT AN URBAN RESEARCH INSTITUTION IN THE SOUTHEASTERN REGION OF THE UNITED STATES

Dissertation Chair: Trevor Turner, Ph.D.
Principal Investigator: LaKeisha Nicole Gibbs

Purpose

You are invited to participate in a research study. The purpose of the study is to investigate the factors that impact graduate student persistence at an urban research institution in the Southeastern region of the United States.

Procedures

If you decide to participate, you will answer all of the questions on the graduate student persistence survey, which will be administered electronically. Participants will be asked to interact with other participants in the focus group portion of the study.

Risks

In this study, you will not have any more risks than you would in a normal day of life.

Benefits

Participation in this study may benefit you personally because the research is focused on gaining valuable information about attrition, retention, and the completion of

Appendix B (continued)

graduate programs. Your answers will assist the researcher with finding best practices for achieving the highest possible retention strategies at urban research institutions.

Voluntary Participation and Withdrawal

Participation in this research is voluntary. You do not have to participate in this study. If you decide to contribute to the study and change your mind, you have the right to drop out at any time. You may skip questions or stop participating at any time. Whatever you decide, you will not lose any benefits to which you are otherwise entitled.

Confidentiality

Your records will be kept private to the extent allowed by law. We will use a coding system rather than a name on study records. Only LaKeisha Gibbs and Dr. Trevor Turner will have access to the information you provide. The code sheet for the focus group will be stored at LaKeisha Gibbs' work office, separate from the data to protect your privacy. Participant's email addresses will not be identified. Your name and other facts that might point to you will not appear when we present this study or publish its results. The findings will be summarized and reported in group form. You will not be identified personally.

Contact Persons

Contact LaKeisha Gibbs at (404) 401-5910 or via email at gpersistenceresearch@ yahoo.com if you have questions regarding this study. If you have questions or concerns about your rights as a participant in this research study, you may contact Dr. Georgianna Bolden in the Division of Research and Sponsored Programs at 404-880-6990 or at research@cau.edu.

Copy of Consent Form to Subject

You will receive a copy of this consent form to keep.

APPENDIX C

Graduate Student Persistence Survey

Dear Graduate Student:

Please provide your assessment and evaluation of your graduate school experience. Provide your responses as frankly as possible. Your identity will be protected, as all survey responses will remain confidential. Please mark the following:

Gender: Male ____ Female ____

Program of Study:

Business____ Education ____Arts & Sciences _____

Social Work_____

Degree Type:

Masters ____ Specialist_____ Doctoral____

Racial/Ethnical Background:

Asian, Pacific Islander___ Black___ Hispanic___

Native American___ White___ Other ___

Age Range: 21 - 25 _____ 26 - 31_____ 32 - 37_____

38-43____ 43 or older _____

Appendix C (continued)

SA = Strongly Agree, A = Agree, U = Uncertain, D = Disagree, SD = Strongly Disagree

	SA	A	U	D	SD
1. My advisement experience meets my expectations.					
2. Advisement is a major component of the department.					
3. My advisor gave me tools to navigate through my program.					
4. My advisor communicated throughout my graduate school experience.					
5. My dissertation (thesis) process was clear due to structured advisement. *Please ignore item if not applicable to your program*					
6. My dissertation (thesis) chair was not as helpful as I needed. *Please ignore item if not applicable to your program.*					
7. I have used grants, loans, and/or scholarships to pay for tuition and fees.					
8. I would not be able to complete my program without receiving financial assistance.					
9. My GRE score was 1000 or above.					
10. My cumulative undergraduate GPA was 3.0 or higher.					
11. Involvement in student organizations enhances the graduate student experience.					
12. Participation in my department's graduate student organization enhanced my experience.					
13. I became familiar with my peers outside of the academic setting.					
14. The department creates opportunities for socialization amongst students.					
15. My family provided emotional support throughout my graduate student experience.					
16. My peers provided emotional support throughout my graduate student experience.					
17. Family distractions have caused difficulties in focusing on my studies.					
18. My family has not been supportive throughout my graduate student experience.					
19. Peers in my program created study groups and workshops independently of the department.					
20. The condition of campus facilities are conducive					
21. The most up-to-date technologies are accessible on my campus.					
22. The condition of the library and access to research materials is not conducive to graduate students.					

Appendix C (continued)

	SA	A	U	D	SD
23. The lack of available parking spaces is a major issue on my campus.					
24. I feel safe on campus in the evenings.					
25. Police and security presence on campus meet my level of expectations.					
26. I have been satisfied with the intellectual climate in the classroom throughout my graduate school experience.					
27. I am pleased with the quality of instruction in my courses.					
28. The program outline was clear, concise, and easy to understand.					
29. Faculty members provide structure and support throughout the program.					
30. Faculty members have been available and accessible through the program.					
31. My commitment to earning a graduate degree is strong.					
32. Although many situations occur during a student's progress toward a degree, I am confident that I will earn my degree.					
33. My likelihood to persist in pursuit of my graduate degree is strong.					
34. It is unlikely that I will reenroll next semester.					
35. I am positive that I will earn a graduate degree from my current institution.					
36. My classmates have influenced my persistence in a positive manner.					
37. I feel supported by my classmates.					
38. I have developed positive relationships with my classmates throughout my graduate program.					

APPENDIX D

Focus Group Questionnaire

Dear Graduate Student:

The purpose of this focus group is to gain your honest opinion of various factors related to your personal experiences in order to investigate its possible impacts on graduate student persistence. Your responses will be kept extremely confidential. Your name will not be noted. I am recording as well as writing verbatim notes as participants respond to questions asked. Please respond based on your experiences at this institution.

Responses are based on the perspective of the opinions of participants currently enrolled in a graduate school program.

FOCUS GROUP QUESTIONS

1. What do you think are the main reasons individuals do not complete graduate programs?

2. What is the most pertinent factor to prohibit a student from completing a graduate program?

3. On a scale of 1 to 10, what is the likelihood that you will complete your graduate program?

4. How would you describe your relationship with your advisor?

5. Has advisement been a contributing factor to your success in the program?

6. Has your advisor been available to meet with you at your request?

7. To what extent did academic peer support play a role in the success in your graduate program?

8. What the main factors which have allowed you to persist in your graduate program?

APPENDIX E

Interview Protocol

Dear Graduate Student:

The purpose of this interview is to gain your honest opinion of various factors related to your personal experiences in order to investigate its possible impacts on graduate student persistence. Your responses will be kept extremely confidential. Your name will not be noted. I am recording as well as writing notes as participants respond to questions asked. Please respond based on your experiences at this institution.

Responses are based on the perspective of the opinions of participants currently enrolled in a graduate school program.

Male or Female _____ Age ____

Program of Study _____

Undergraduate GPA _____ GRE Score ____ Masters_____

Specialist_____ Doctoral ___

Asian/Pacific Islander___ Black____ White___
Hispanic____ Native American____ Other____

Definition of Terms:

Program Advisement: Refers to the advisement provided to the student by the assigned advisor within the department. This interaction includes the relationship during the matriculation of students through coursework.

Research Advisement: Refers to the advisement provided to the student by the dissertation or thesis advisor within the department. This interaction includes the relationship throughout the dissertation/thesis stage (specifically in reference to doctoral programs/master's programs requiring thesis).

Appendix E (continued)

Financial Aid Status: The extent to which financial aid status has an influence on graduate student persistence and completion of degree.

Student Socialization and Involvement: The extent to which the levels of active engagement of graduate students outside of the classroom relates to graduate student persistence. For this study, socialization is categorized as participation in student activities, participation in student organizations, and the informal collaboration of student interaction beyond the classroom.

Family Support and Peer Support: The extent to which the type of support received from family members assists in completion of a degree for students throughout the graduate program. For this study, family support is considered as emotional and financial support.

Institutional Physical Resources: The extent to which the condition of campus facilities and accessibility to technology has an effect on graduate student persistence. For this study, availability of technology and accessibility to research materials is considered.

Student Response to Environmental Distractions: The extent to which to the student's response to environmental campus distractions has an effect on graduate student persistence. For this study, both campus safety and security are considered as environmental distractions, due to the nature of the time graduate student classes are offered and available.

Student Response to Academic Structure: The extent to which the outline of the graduate program, as determined by the institution, affects graduate student persistence. Moreover, students must follow a program of study to lead to completion of a graduate degree. For this study, the academic structure is determined as the quality of instruction, the clarity of the programmatic outline, and departmental accessibility for navigation through the program toward completion of a graduate degree.

Academic Peer Support: The extent to which the support provided by academic peers effects graduate student persistence. For purposes of this study, encouragement and collaboration from classmates within the graduate program is considered.

INTERVIEW QUESTIONS

Q1. How do you believe program advisement may impact the persistence of students enrolled in graduate programs at an urban research institution?

Q2. How do you believe research advisement may impact the persistence of students enrolled in graduate programs at an urban research institution?

Appendix E (continued)

Q3. How do you believe financial aid status may impact the persistence of students enrolled in graduate programs at an urban research institution?

Q4. How do you believe student involvement and socialization may impact the persistence of students enrolled in graduate programs at an urban research institution?

Q5. How do you believe family and peer support may impact the persistence of students enrolled in graduate programs at an urban research institution?

Q6. How do you believe institutional physical resources may impact the persistence of students enrolled in graduate programs at an urban research institution?

Q7. How do you believe environmental distractions may impact the persistence of students enrolled in graduate programs at an urban research institution?

Q8. How do you believe academic structure may impact the persistence of students enrolled in graduate programs at an urban research institution?

Q9. How do you believe academic peer support may impact the persistence of students enrolled in graduate programs at an urban research institution?

Q10. What is the greatest impact on persistence, in a brief statement?

REFERENCES

Allan, P., & Dory, J. (2001). *Understanding doctoral attrition: An empirical study.* Faculty Working Papers, No. 17. Retrieved from http://digitalcommons.pace.edu/lubinfaculty_workingpapers/17

Badura, A. (1977). Self-efficacy: Toward a unifying a theory of behavioral change. *Psychological Review, 84*(2), 191-215.

Bain, S., Fedynich, L., & Knight, M. (2010). The successful graduate student: A review of the factors for success. *Journal of Academic and Business Ethics*, *3*(7), 1-9.

Barnett, J. (2002). Focus group tips for beginners. *Texas Center for the Advancement of Literacy & Learning*. Retrieved from http://www-tcall.tamu.edu/orp/orp1.htm

Bell, N. E. (2011). *CGS/GRE survey of graduate enrollment and degrees*. Washington, DC: Council of Graduate Schools.

Bischoping, K., & Bell, S. (1998). Gender and contradictory definitions of university accessibility. *The Review of Higher Education, 21*(2), 179-194.

Brazziel, M., & Brazziel, W. (1987). Impact of support for graduate study on program completion of black doctorate recipients. *The Journal of Negro Education, 56*(2), 145-151.

Brink, W. J. (1999). Selecting graduate students. *The Journal of Higher Education, 70*(5), 517-523.

Brockman, J. L., Nunez, A. A., & Basu, A. (2010). Effectiveness of a conflict resolution training program in changing graduate students style of managing conflict with their faculty advisors. *Innovative Higher Education*, *35*, 277-293.

Brown, H. (2005). *Findings from the 2005 CGS international graduate student admissions survey III: Admissions and enrollment*. Washington, DC: Council of Graduate Schools.

Cooke, D., Sims, R., & Peyrefitte, J. (1995). The relationship between graduate student attitudes and attrition. *The Journal of Psychology*, *129*(6), 677-688.

Council of Graduate Schools. (2009). *Graduate degree attainment of the U.S. population.* Washington, DC: Author.

Council of Graduate Schools. (2010). *Ph.D. completion and attrition: Policy, numbers, leadership and next steps*. Washington, DC: Author.

Decker, R. (1973). Success and attrition characteristics in graduate studies. *The Journal of Economic Education, 4*(2), 130-137.

Deggs, D., Grover, K., & Kacirek, K. (2010). Expectations of adult graduate students in an online degree program. *College Student Journal*, *44*(3), 690-699.

De Valero, Y. (2001). Departmental factors affecting time-to-degree and completion rates of doctoral students at one land-grant research institution. *The Journal of Higher Education, 72*(3), 341-367.

Dimmine, C. (1992). *An essential guide to graduate admissions. A policy statement.* Washington, DC: Council of Graduate Education.

Dube, M. A., & Zinatelli, M. (1997). A structured interview for selection of graduate students. *Chemical Engineering Education, 31*(4), 210-213.

Ehrenberg, R.G., & Mavros, P. G. (1992). Do doctoral students' financial support patterns affect their times-to-degree and completion probabilities. *NBER Working Papers.4070*, 1-32.

Ellis, E. (2001). The impact of race and gender on graduate school socialization, satisfaction with doctoral study, and commitment to degree completion. *The Western Journal of Black Studies*, *25*(1), 30-45.

Felder, P. (2010). On doctoral student development: Exploring faculty mentoring in the shaping of African American doctoral student success. *The Qualitative Report*, *15*(2), 455-474. Retrieved from http://www.nova.edu/ssss/QR/QR15-2/felder.pdf

Gardner, S. K. (2005). *If it were easy, everyone would have a Ph.D. Doctoral student success: Socialization and disciplinary perspectives.* Unpublished doctoral dissertation, Washington State University, Pullman.

Gardner, S. K. (2010). Contrasting the socialization experiences of doctoral students in high- and low-completing departments: A qualitative analysis of disciplinary contexts at one institution. *The Journal of Higher Education, 81*(1), 61-81.

Gardner, S. K., & Barnes, B. J. (2007). Graduate Student Involvement: Socialization for the Professional Role. *Journal of College Student Development, 48*(4), 369-387.

Gardner, S. K., Hayes, M. T., & Neider, X. N. (2006). The dispositions and skills of a Ph.D. in education: Perspectives of faculty and graduate students in one college of education. *Innovative Higher Education, 31*, 287-299.

Golde, C. M. (2005). The role of the department and discipline in doctoral student attrition: Lessons from four departments. *Journal of Higher Education, 76*(6), 669-700.

Groen, J., Jakubson, G., Ehrenberg, R. G., Condie, S., & Liu, A. Y. (2005). *Program design and student outcomes in graduate education* (CHERI Working Paper #86). Retrieved from Cornell University, ILR School site: http://digitalcommons.ilr.cornell.edu/workingpapers/64/

Gururaj, S., Vasquez Heilig, J., & Somers, P. (2010). Graduate student persistence: A meta-analysis of evidence from three decades. *Journal of Student Financial Aid, 40*(1), 31-46.

Hegarty, N. (2011). Adult learners as graduate students: Underlying motivation in completing graduate programs. *The Journal of Continuing Higher Education, 59*, 146-151.

Johnson-Bailey, J., Valentine, T., & Cervero, R. (2009). Rooted in the soil: The social experience of black graduate students at a research university. *Journal of Higher Education, 80*(2), 178-203.

Kim, D., & Otts, C. (2010). The effect of loans on time to doctorate degree: Differences by race/ethnicity, field of study, and institutional characteristics. *The Journal of Higher Education, 81*(1), 1-32.

Kraska, M. (2008). Retention of graduate students through learning communities. *Journal of Industrial Teacher Education, 45*(2), 54-70.

Kuncel, N. R., & Hezlett, S. A. (2007). Standardized tests predict graduate student's success. *Science, 315*(5815), 1080-1081.

Kuncel, N. R, Wee, S., Sarifin, L., & Hezlett, S. A. (2010). The validity of the graduate record examination for master's and doctoral programs: A meta-analytic investigation. *Educational and Psychological Measurement*, *70*(2), 340-352.

Lacey, A., & Luff, D. (2001). *Trent focus for research and development in primary health care: An introduction to qualitative analysis*. London: Trent Focus.

Lerea, L., Greenberg, A., Mundy, D., Harris, N., Khosla, C., & Manning, M. (1998). University of North Carolina Chapel Hill Graduate School Campus Safety Report. Retrieved from http://www.unc.edu/depts/trustees/PP%201108%20UA%20Grad%20Student%20Safety.pdf

Liseo, P. A. (2005). *Graduate and professional student within-year persistence and financial aid.* Unpublished doctoral dissertation, University of Missouri – St. Louis. UMI:AAT3178912.

Lovik, E. (2004). Advising graduate students: Understanding the influence of Family on graduate education. *The Mentor: An Academic Advising Journal.* Retrieved from http://www.psu.edu/dus/mentor/041020el.htm

Lovitts, B. E. (1996). *Who is responsible for graduate student attrition—The individual or the institution? Toward an explanation of the high and persistent rate of attrition.* Baltimore: University of Maryland.

Lovitts, B. E. (2001). *Leaving the ivory tower: The causes and consequences of*

departure from doctoral study (1st ed.). New York: Rowman and Littlefield Publishers, Inc.

Maher, M. A., Ford, M. E., & Thompson, C. M. (2004). Degree progress of women doctoral students: Factors that constrain, facilitate, and differentiate. *The Review of Higher Education, 27*(3), 385-408.

McCoy, D. L, & Gardner, S. K. (2011). The transition from full-time employment to full-time graduate student: A qualitative exploration of master's and doctoral students' experiences in higher education programs. *Enrollment Management Journal*, *5*(1), 84-107.

McLaughlin, D., & Tierney, W. G. (1993). *Naming silenced lives: Personal narratives and processes of educational change*. New York: Routledge.

Merriam, S. B. (1998). *Qualitative research and case study applications in education.* San Francisco: Jossey-Bass.

Myers, L. (1999). Barriers to completion of the doctoral degree in educational administration. Retrieved from http://scholar.lib.vt.edu/theses/available/etd-041699125349/unrestricted/LHMyers.PDF for Education Statistics.

Digest of Education Statistics. (2011). Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.

Nelson, C., & Lovitts, B. E. (2001). 10 ways to keep graduate students from quitting. *The Chronicle of Higher Education*, B20.

Nerad, M., & Cerny, J. (1993). From facts to action: Expanding the graduate division's educational role. In L. Baird (ed.), *Increasing graduate student retention and degree attainment. New directions in institutional research* (vol. 80, pp. 27–40). San Francisco: Jossey-Bass.

Neshiem, B., Guentzel, M., Gansemer-Topf, A., Ross, L., & Turrentine, C. (2006). If you want to know ask; Assessing the needs and experiences of graduate students. *New Directions for Student Services, 115,* 5-17.

Office of Planning, Assessment, and Research. (2010). Trend book 2005-2010. Retrieved from http://www.cau.edu/CMFiles/Docs/2005-010%20Trendbook%20011312.pdf

O'Neill, K. J., George, C. C., Willson, V. L., Courville, T. G., McGee, J. L., Amado, A. J., Tanguma, J., & Walker, D. L. (2002).*College and University*,*77*(3), 23-26.

Ostrove, J. M., Stewart, A. J., & Curtin, N. L. (2011). Social class and belonging: implications for graduate students' career aspirations. *The Journal of Higher Education*, *82*(6), 748-774.

Oswalt, S., & Riddock, C. (2007). What to do about being overwhelmed: Graduate students, stress and university services. *College Student Affairs Journal*, *27*(1), 24-44.

Polson, C. J. (1998). Fostering graduate socialization into adult education. *Adult Education, 10*(2), 23-26.

Polson, C. J. (2003). Adult graduate students challenge institutions to change. *New Directions for Student Services*, *102*, 59-68.

Punyanunt-Carter, N. M., & Wrench, J. S. (2008). Advisor-advisee three: Graduate students' perceptions of verbal aggression, credibility, and conflict styles in the advising relationship. *Education, 128*(4), 579-587.

Rajapopalan, R. (1999). Getting the most out of graduate school. *Chemical Engineering Education, 33*(4), 258-261.

Rakes, G. C., & Dunn, K. E. (2010). The impact of online graduate students' motivation and self-regulation on academic procrastination. *Journal of Interactive Online Learning, 9*(1), 78-93.

Sallee, M. (2011). Performing masculinity: Considering gender in doctoral student socialization. *Journal of Higher Education, 82*(2), 187-216.

Sampson, C., & Boyer, P. G. (2001). GRE scores as predictors of minority students' success in graduate study: An argument for change. *College Student Journal, 35*, 271-279.

Shambaugh, R. N. (2000). Reframing doctoral programs: A program of human inquiry for doctoral students and faculty advisors. *Innovative Higher Education, 24*(4), 295-305.

Smith, S. (2000). Graduate student mentors for technology success. *Teacher Education and Special Education, 23*(2), 167-82.

Stockburger, D. (2001). *Introductory statistics: Concepts, models, and applications*. Cincinnati, OH: Atomic Dog Publishing.

Strayhorn, T. L. (2010). More than money matters: An integrated model of graduate student persistence. *Journal of Student Financial Aid, 40*(3), 4-25.

Switzer, A., & Perdue, S. W. (2011). Dissertation 101: A research and writing intervention for education graduate students. *Education Libraries, 34*(1), 4-13.

Tinto, V. (1993). Leaving college: Rethinking the causes and cures of student attrition (2nd ed.). Chicago: The University of Chicago Press.

Tinto, V. (1997). Colleges as communities: Exploring the educational character of student persistence. *Journal of Higher Education, 68*(6), 599-623.

University of Maryland—Baltimore. (2003). Ph.D. attrition and persistence survey. Baltimore, MD: Institutional Research Review Board.

Weidman, J. C., Twale, D. J., & Stein, T. L. (2001). Socialization of graduate and professional students in higher education: A perilous passage? *ASHE-ERIC Higher Education Report*, *28*(3), 2-136.

West, I. J., Gokalp, G., Vallejo, E. B., Fischer, L., & Gupton, J. (2011). Exploring effective support practices for doctoral students' degree completion. *College Student Journal*, *45*(2), 310-314.

Willingham, W. W. (1974). Predicting success in graduate education. *Science*, *183*, 273-278.